DARPA SUBTERRANEAN CHALLENGE

Company/Attendee Contact List

(sorted alphabetically by company name)

Ektate, Sanjay
Email: sanjay_ektate@hotmail.com
Phone: 91-9867121517
Individual Capability Statement: Consultant; Inventor; Shortlisted for developing robotic roof inspection prototype by Innocentive.com 2016-17, selected for Exhibition Poster Presention at AASR&D American Astronautical Society R&D Conference in July 2018 (NASA Sponsored), ROBOTICS, Mega SOLAR PV FARMS 750 MW

Hutson, Matthew
Email: matt@silverjacket.com
Phone: 781-864-4072

Lewis, Drew
Email: munden@gmail.com
Phone: 610-656-6220
Individual Capability Statement: I'm a hobby drone builder and this sounds like a fun challenge.

Pelaez, Nicolas
Email: Nicolas.Pelaez.UCF@gmail.com
Phone: 561-603-1519
Individual Capability Statement: Daily work involves modeling real-world systems data using a wide range of machine learning concepts in an attempt to reliably predict system performance for yet-unseen regimes.

Uccello, Adam
Email: adam.uccello@gmail.com
Phone: 571-278-2338
Individual Capability Statement: Extensive experience in embedded systems design, firmware development, mesh networking, and ultra low power algorithms and implementations. Current research focus in deep learning, robotics, and embodied intelligence.

Waechter, Jerome
Email: jerome.waechter@gmail.com
Phone: 727-785-9137
Individual Capability Statement: I spent many years in electrical communications design. I am transitioning into using my skills in the field of automation, and competition Robotic systems. I have participated in the NASA-WPI Sample Return Robot Centennial Challenge.

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170 Engineer Group
Capability Statement: Experienced in military use of subterranea utilizing find, map and model functions.

Bulmer, Mark
Email: 123bulme@armymail.mod.uk
Phone: 240-494-6036

*Attendees listed gave permission via the registration website to be included in this contact list.

417 Design Solutions
Capability Statement: Several years experience in cave exploration. Owner and operator of custom fabrication business.

Lapthorne, Dave
Email: davidlapthorne@gmail.com
Phone: 417-522-5790

Acme Light Industries, LLC
Capability Statement: Robotic and in particular flying autonomous robotics development. Using these capabilities and machine vision capabilities to map challenge environments.

Nall, Richard
Email: rnall@ricknall.org
Phone: 251-975-7672

Air Force Research Laboratory

Hopkins, Nicholas
Email: hopkins.nc52@gmail.com
Phone: 937-631-4547
Individual Capability Statement: I'm interested in providing multi-sensor fusion capabilities to devices performing subterranean exploitation.

Sherrill, Ryan
Email: ryan.sherrill.1@us.af.mil
Phone: 850-883-1914
Individual Capability Statement: Autonomy lead for AFRL/RW autonomous collaborative research

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AMT, Inc.
Capability Statement: We specialize in design and development of industrial unmanned systems and solutions since 2002 in collaboration with organizations offering innovative UGV, UAV, and s/UAS integrated systems and solutions.

Sepahban, Amir
Email: usaamt@gmail.com
Phone: 424-241-2268

Anyar Inc.
Capability Statement: Anyar works in development and research for UAS including platform hardware, sensor integration, command & control systems, and autonomy algorithms integration, as well as cross platform and cross framework (including DARPA-CODE) integration of collaborative autonomy algorithms and capabilities.

Coates IV, Martin
Email: mcoates@anyainc.com
Phone: 850-226-8511

Army Cyber Institute
Capability Statement: We set up a mesh communications network in a sub-t environment earlier this year.

Hamilton, Stephen
Email: stephen.hamilton@usma.army.mil
Phone: 845-938-9649

Army Research Laboratory

Fink, Jon
Email: jonathan.r.fink3.civ@mail.mil
Phone: 301-394-5616

Mathis, Allison
Email: allison.m.mathis2.civ@mail.mil
Phone: 301-394-5518

Stump, Ethan
Email: ethan.a.stump2.civ@mail.mil
Phone: 301-394-1222

AutoModality
Capability Statement: AutoModality is a global leader in autonomous mobile robotics specializing in GPS-denied and RF-denied Unmanned Aerial Systems.

Hennage, Daniel
Email: dan@automodality.com
Phone: 415-215-0738

Bat Research
Capability Statement: Experienced Engineer in Robust & Survivable Wireless Communications Systems for multiple Services/Agencies. Decades of experience in Speleological Exploration, as First Responder, including Emergency Communications, Wilderness Medicine, Cave Rescue and Mountain SAR.

Harrison, Gene
Email: bats@starpower.net
Phone: 703-585-4565

Beihang University
Gonzales, Michael
Email: nasmiclo27@gmail.com
Phone: +8613161780300
Individual Capability Statement: I'm undergoing a Global Navigation Satellite Systems Master's course with research direction on Real Time Kinematics (RTK) centimeter level accuracy. I have experience working on RTK Library, Matlab programing, data processing, multi constellation data adquisition Ublox M8T, TI-CC1310.

Big Mountain Robotics
Capability Statement: We provide photogrammetry software and drone operations for the production of precisely geo-referenced digital elevation models, orthomosaics and point clouds. We would be interested in helping solve the difficulties in SubT mapping and persistent situational awareness either as a standalone contributor or as a teammate.

Stoermer, Pierre
Email: pierre@dronemapper.com
Phone: 970-417-1102

Blenny Techno Business Services Private Limited
Capability Statement: I have fully confident and knowledge about the challenges and good developmental skills, problem solving methods have.

Puppolu, Raja Sekhar
Email: blennytechno@gmail.com
Phone: 888-666-6205

Bondtech
Capability Statement: We are developing software for navigating / managing, scanning, & storing - transmitting data collected utilizing hardware drone carrier and orientation & control of LiDAR.

Brainard, John
Email: jbrainard@bondtech.net
Phone: 606-677-2616

Cairo University
Elbadrawy, Mohamad
Email: mohmmadayman@aucegypt.edu
Phone: 0020-110-083-8166
Individual Capability Statement: Computer Engineering with Robotics Experience.

California Institute of Technology
Burdick, Joel
Email: jwb@robotics.caltech.edu
Phone: 626-395-4139
Individual Capability Statement: I lead the Caltech contribution to the JPL-lead team participating in the challenge. My expertise is in robotic mobility and control.

Carnegie Mellon University
Travers, Matthew
Email: mtravers@andrew.cmu.edu
Phone: 303-709-4489
Individual Capability Statement: I am the co-Lead for the funded team representing the Robotics Institute. I specialize in planning and control for robotic vehicles.

Centeye, Inc.
Capability Statement: Centeye develops vision-based autonomy for nano drones allowing them to operate in GPS-denied environments including enclosed spaces, tunnels, and vertical shafts. Our approach works in all light levels (daylight to dark) and enables all sensing and control to be performed on the drone.

Barrows, Geoffrey
Email: geof@centeye.com
Phone: 202-238-9545

Centro Universitario de La Defensa
Tardioli, Danilo
Email: ropert@unizar.es
Phone: 876555459
Individual Capability Statement: His research activity is mainly focused on wireless real-time and quality-of-service communication in mobile ad-hoc networks in confined and hostile environments. He is a member of the Robotics, Perception, and Real-Time group of the University of Zaragoza

Chemring Group
Capability Statement: Chemring Group is a global business providing a range of advanced technology products and services to the aerospace, defence and security markets. Chemring has extensive operations in the Americas, Europe, Middle East and Asia.

Cummings, Will
Email: wcummings@chemringsensors.com
Phone: 703-574-6067

Domitrovits, John
Email: amarshall@chemringsensors.com
Phone: 703-574-6067

Golden, Josh
Email: jgolden@chemringgroup.com
Phone: 703-574-6067

Colorado School of Mines
Capability Statement: Autonomous subterranean navigation and exploration and system design.
Petruska, Andrew
Email: apetruska@mines.edu
Phone: 303-384-2021

CSIRO
Kottege, Navinda
Email: navinda.kottege@csiro.au
Phone: +61400343017
Individual Capability Statement: I have extensive R&D experience in legged locomotion and in rough terrain. I lead the Dynamic Platforms Research team in CSIRO's Robotics and Autonomous Systems Group.

Cybernet Systems
Capability Statement: Integrate autonomous robotics systems In depth knowledge of 3D image and ladar sensor and 3D structure capture, SLAM

Jacobus, Charles
Email: chuck@cybernet.com
Phone: 734-668-2567

Czech Technical University
Zimmermann, Karel
Email: zimmerk@fel.cvut.cz
Phone: +420 2 2435 5733
Individual Capability Statement: Investigator in Search&Rescue EU FP7 project (TRADR). Computer vision researcher: http://cmp.felk.cvut.cz/~zimmerk/

DARPA
Adams, Jared
Email: jared.adams@darpa.mil
Phone: 703-526-2798

DaTaaZee
Capability Statement: Data processing & -analytics use cases, demonstrator-prototype-mvp / TRL1-9

Rietveld, Theo
Email: theo.rietveld@icloud.com
Phone: +31(0)658876607

DTRA
Hastie, Bob
Email: robert.l.hastie.civ@mail.mil
Phone: 571-616-6167

Dynamic Graphics, Inc.
Capability Statement: Dynamic Graphics, Inc.'s software CoViz 4D is a powerful geospatial visualization environment with the ability to visualize multiple types of static and time varying data including point data, 2D data, 3D data, image data, lidar data, hyperspectral data, etc. CoViz 4D can serve as a visualization environment for the various subterranean sensor data.

Feige, Jeff
Email: jeff@dgi.com
Phone: 410-963-2209

Paradis, Art
Email: art@dgi.com
Phone: 510-522-0700

Usman, Shawn
Email: shawn@dgi.com
Phone: 808-265-0029

ECSI, LLC
Gardner, Steve
Email: jsgardner@engrservices.com
Phone: 859-233-2103
Individual Capability Statement: Mining Engineer with experience in the encumbered space of underground environments; coal, hardrock, quarry, mine rescue, environmental, surveying, mapping, etc.

Edison Steinmetz Center
Capability Statement: The Cave Metrology Consortium Mapper uses adaptive sensing to rapidly map a range of surfaces. As an imaging-based system, it is lower cost and more robust than mechanically scanning technologies. The team has over 160 years of caving experience, and access to natural caves for extensive testing and development.

Cantello, Craig
Email: cantelloplus@gmail.com
Phone: 518-646-1989

Edison Tech Center
Forando, Amy
Email: aforando@gmail.com
Phone: 802-777-1177
Individual Capability Statement: Computer Engineer

Electra Blue
Capability Statement: Lic Arch Int Designer, Spec in New Tech Dev. Frmr Disney Imagineer, Corp Leadership, Team Building. Software Dev: Apple, Netscape, Microsoft. Able to Draw/Paint/Sculpt. Systems Engineering Study w/ NASA, MIT, ERAU. User testing of Building Info Science “BIMStorm” 2010-18. Am able to work w/ Org or Groups for team-building in DC and/or on site in KY.

Rupp, Kay
Email: projects@electrablue.com
Phone: 502-608-4126

Element Public Relations
Smith, Tim
Email: tsmith@elementpr.com
Phone: 415-350-3019
Individual Capability Statement: I'm the PR contact for Open Robotics, who is working with DARPA

Endeavor Robotics
Weatherwax, David
Email: dweatherwax@endeavorrobotics.com
Phone: 978-769-9385
Individual Capability Statement: Responsible for all software development at Endeavor Robotics, the world's largest UGV supplier.

EPIC blue
Capability Statement: EPIC blue provides a Seamless Location Awareness solution for GPS denied environments. Our advanced motion intelligence enables the seamless indoor and outdoor positioning of people without having to rely on a pre-installed hardware infrastructure.

Ilsbroux, Michael
Email: michael.ilsbroux@epic.blue
Phone: 0499-996-594

Esri
Capability Statement: Esri provides ArcGIS software to process, visualize, and analyze subterranean environments in 2D and 3D. We support LAS, point cloud and imagery data to create easy to use apps and browser based tools.

Smedley, Tom
Email: tsmedley@esri.com
Phone: 703-506-9515

Exium Reality
Capability Statement: PNT (positioning, navigation and timing) real-time' solution based on electrical engineering as GPS-alternative and being functional in any underground location, even with offline communications (no WiFi, Bluetooth, UWB, cellphone or GPS signal is required).

Clavel, Guillaume
Email: guillaume.clavel@exium-reality.com
Phone: +1 438 939-8323

Exyn Technologies
Capability Statement: Software enabling aerial robots to autonomously and safely execute complex missions in GPS-denied, commercial environments.

Balasa, Raghu
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Derenick, Jason
Email: jderenick@exyntechnologies.com
Phone: 215-999-0197

Thomas, Justin
Email: jthomas@exyntechnologies.com
Phone: 717-572-0975

Fairmont Consulting Group
Capability Statement: Fairmont supports clients in strategic analyses and transaction due diligence assignments across the supply chain for defense platforms, including sensor and robotic technologies. Two current clients are interested in DARPA's SubT Challenge.

Currie, Dylan
Email: dcurrie@fairmontcg.com
Phone: 260-450-3174

FDNY
Downey, Joseph
Email: joseph.downey@fdny.nyc.gov

Florida Polytechnic University
Jernigan, Michael
Email: Mjernigan@floridapoly.edu
Phone: 863-289-8335
Individual Capability Statement: Sensor Characterization and Development. Solid-State Electronics Prototyping Simulation and Design

Flyability SA
De Moor, Maarten
Email: maarten.demoor@flyability.com
Phone: 078-703-1240
Individual Capability Statement: As a project manager for the Flyability subteam of the Cerberus team, I will make sure our developments are synced and delivered on time and within budget.

Ford Motor Company

Han, Zhijun
Email: zhan10@ford.com
Phone: 313-648-9105
Individual Capability Statement: Supporting Ford AV Simulation.

Lu, Jianbo
Email: jlu10@ford.com
Phone: 313-323-9736
Individual Capability Statement: Automating robotic platforms for real world applications using real-time computer vision, AI, control systems, human-robot-interaction, and rapid prototyping.

Miller, Justin
Email: jmill597@ford.com
Phone: 313-621-4491
Individual Capability Statement: I currently work on hardware configuration for mobile robots/autonomous vehicles as well as software development/implementation for sensor fusion, localization, SLAM, and path planning algorithms.

Panigrahi, Smruti
Email: spanigr2@ford.com
Phone: 313-323-6526
Individual Capability Statement: Robotics engineer with experience in perception, localization, robotic simulation, computer vision and deep-learning

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General Electric
Potyrailo, Radislav
Email: potyrailo@ge.com
Phone: 518-387-7370
Individual Capability Statement: Low-power micro-sensor systems for gases and volatiles based on multivariable detection principles; standard comm to drone, followed by standard comm to remote base.

General Electric Global Research
Fitzpatrick, Jordan
Email: jordan.fitzpatrick@ge.com
Phone: 202-737-4240
Individual Capability Statement: Sensors, robotics, data analytics in aerospace, mining, and energy sectors.

Georgia Institute of Technology

Arkin, Ronald
Email: arkin@cc.gatech.edu
Phone: 404-894-8209
Individual Capability Statement: Multi-robot teams, human-robot interaction, mission specification

Jiang, Shu
Email: sjiang@gatech.edu
Phone: 407-506-2456
Individual Capability Statement: PhD candidate in robotics at Georgia Tech

Martinez, Daniel
Email: danmartinez78@gmail.com
Phone: 786-521-3339
Individual Capability Statement: Experience in C++ and python, computer vision, ML/DL/AI.

Vela, Patricio
Email: pvela@gatech.edu
Phone: 404-894-8749
Individual Capability Statement: Autonomous navigation and mapping algorithms.

Georgia Tech Research Institute
Capability Statement: Machine vision / optical metrology, mapping, control logic, robotics, and or autonomous drone. Off the shelf robotic solutions already in use by GTRI are ready to be combined with a number of sensor candidates, 3D mapping sensors and software.

Harris, T. Robert
Email: robert.Harris@gtri.gatech.edu
Phone: 404-407-8290

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goTenna
Capability Statement: UHF/VHF wireless radio mesh network for off-grid communication of situational awareness, C2 and chat using ATAK or other applications. Mesh network facilitates comms within sub- t environments with low-cost disposable radios dropped enroute.

Schueren, James
Email: jim@gotenna.com
Phone: 425-354-0165

Grit Robotics
Capability Statement: We are a past competitor in the DARPA Grand Challenge, Urban NQE, Robotics Trials and Robotics Challenge. We are a collection of Professors, students from Colorado Mesa University and interested engineers in the community.

Castleton, Karl
Email: karl.castleton@gmail.com
Phone: 970-462-7280

Helios Remote Sensing Systems, Inc.
Capability Statement: Developer of RF systems, e.g., radar systems, for ground penetration and sense-through-the-wall applications.

Szczepanski, Walter
Email: walter.szczepanski@heliossensors.com
Phone: 315-356-1661

Hendrick Motorsports
Capability Statement: Silent Tactical Energy Enhanced Dismount (STEED) is an innovative approach to enable mobility in subterranean environments. STEED provides a platform that will significantly enhance the stealth, speed and feasibility of dismounted operations in tunnel systems, urban underground infrastructures and cave networks.

Flanagan, Rhegan
Email: rflanagan@hmsracing.com
Phone: 704-455-0633

Walker, Jordan
Email: j.walker@hmsracing.com
Phone: 704-455-0368

Iceni Labs
Capability Statement: Have developed a non-contact vital signs monitor using an UWB radar. Currently being tested and evaluated under a UK Department of Health innovation award.

Giles, Alexander
Email: Alexander.giles@icenilabs.com
Phone: +447919337723

Imperial College London
Kaczmarek, Sylvester
Email: s.kaczmarek17@imperial.ac.uk
Phone: +447498313737
Individual Capability Statement: AI Safety and Transparency in autonomous systems.

Impossible Incorporated LLC
Capability Statement: I have spent the past 6 years developing novel snake-like robotic technologies along with the world's smallest, strongest gear boxes. These technologies have a number of different applications and are well suited for problems like those in this DARPA challenge.

Bilsky, Matt
Email: matt@mattcomp.com
Phone: 215-620-2116

Isakson Engineering
Capability Statement: Experience with a number of the DARPA Robotics Challenges.

Isakson, Steve
Email: swi@isaksonengineering.com
Phone: 805-461-6519

IXI Technology
Capability Statement: IXI has experience in deep cave exploration utilizing proprietary RF and Drone based systems.

Carter, Michael
Email: michaelcarter@ixitech.com
Phone: 714-221-5000

Del Castillo, Byron
Email: byrond.bdc@gmail.com
Phone: 714-221-5000

Jannatec Technologies
Capability Statement: Jannatec Technologies provides the mining industry with Products and Solutions that improve productivity and safety for miners. Since its incorporation in 1999, Jannatec has grown to an organization of 25 staff with its head office in Sudbury, Ontario.

Luoma, Steffon
Email: sluoma@jannatec.com
Phone: 705-566-3939

Jarriquez
Capability Statement: Jarriquez develops mobile 3D mapping solutions for industrial companies. Our two solutions, a handheld tablet and a self piloted drone, allow to produce 3D maps of complex environments with minimum effort.

Rampal, Marc
Email: marc.rampal@jarriquez.com
Phone: 33 6 51 90 02 71

Jersey Media Network
Capability Statement: We've been involved in robotics and AI research for about 4 years. While we've done some work with hardware (vehicles and drones), our strength is in algorithms for computer vision, navigation, neural networks and more.

Fotache, Chris
Email: chrisfotache@gmail.com
Phone: 732-245-0412

Jet Propulsion Laboratory
Capability Statement: 1) Long-endurance all-terrain mobility platform 2) Resilient VIO and MQS-based localization 3) Robust distributed mapping under uncertainty 4) Disruption-Tolerant Networking 5) Risk- aware belief space autonomy

Agha, Ali
Email: aliagha@jpl.nasa.gov
Phone: 626-840-9140

Wolf, Michael
Email: wolf@jpl.nasa.gov
Phone: 818-746-7100

JSJ Communications
Jones, Johanna
Email: johanna@jsjcomms.com
Phone: 571-217-5598

K. K. Tool Co. & Koehler Organization
Capability Statement: Our manufacturing capabilities service industries such as UAV, Aerospace, Automotive, Industrial Equipment, & consumer products. We see our capabilities as a great asset to achieving the goal of the Subterranean Challenge successfully.

Koehler, John
Email: info@koehlerorganization.com
Phone: 937-325-1373

KAIST
Jung, Sunggoo
Email: sunggoo@kaist.ac.kr
Phone: +821094527843
Individual Capability Statement: Ph.D candidate, mainly researching vision based indoor navigation.

Lee, Hanseob
Email: hslee89@kaist.ac.kr
Phone: +82-42-350-7138

Kentucky Karst Conservancy
Capability Statement: We have been collecting LiDAR data of a cave in Kentucky and have a 3D model of about three miles of passage. Some of the work can be found at bigbatlidar.org. The model has been put into VR and other software. The cave data paired with terrestrial LiDAR will make an excellent field test model for technology looking for caves.

Bailey, Ken
Email: kbailey59@windstream.net
Phone: 502-295-9015

Kognitive Ltd
Capability Statement: Our very small team includes a human factors expert, a naval engineer, and a roboticist.

Smith, Joshua
Email: kognate@gmail.com
Phone: 312-933-9916

Kopis Mobile
Capability Statement: Kopis Mobile creates custom apps and app-enabled electronics equipment for the Department of Defense, law enforcement and private security markets.

McKenna, Jason
Email: jmckenna@kopismobile.com
Phone: 601-618-4969

Korea Institute Of Robot And Convergence
Capability Statement: Our center implements national projects for disaster response robotics (especially, firefighters), so for them, response technologies is very important issue.

Lee, Soyeon
Email: leesy45@kiro.re.kr
Phone: +82-54-278-0893

L3 Adaptive Methods
Capability Statement: Autonomous route planning, limited communications environments, sensor systems.

Hart, Lewis
Email: lhart@adaptivemethods.com
Phone: 703-667-7816

L3 Technologies
Capability Statement: L3 is working on GPS Denied Technologies for the Dismount Solder needs.

Alexander, Steve
Email: steve.alexander@L3t.com
Phone: 714-651-7031

M3 Defense Consulting
Martin, Misty
Email: Misty@M3DefenseConsulting.com
Phone: 586-612-5933

Ponce, Christina
Email: Christina@M3defenseconsulting.com
Phone: 586-209-2102

Maxed-Out
Capability Statement: Team came in 2nd Place in the SRRC 2016 challenge. Strong base of Engineering talent in Silicon Valley and University of Washington.

Maxwell, Greg
Email: gregmaxwell@mac.com
Phone: 949-547-6540

MedAcuity Software
Capability Statement: Acuity RobotX (A division of MedAcuity Software) is a small team of robotics software and controls engineers. This fast-growing team has a wealth of experience in regulated medical robotics and ROS-based mobile robotics.

Amlicke, Tom
Email: tamlicke@acuityrobotx.com
Phone: 978-799-3119

MetaMorph, Inc.
Capability Statement: Part of TASCK SBIR producing automation and analysis tools for rapid composition, variation, and simulation of robotics systems. Project areas of focus include behavioral composition, composite physical-behavioral models, model-based URDF-generation, and Gazebo simulation

Bapty, Ted
Email: ted.bapty@metamorphsoftware.com
Phone: 615-429-3535

Coombe, Joseph
Email: joseph.l.coombe@gmail.com
Phone: 615-295-8133

Michigan Tech

Chase, Richard
Email: rachase@mtu.edu
Phone: 734-944-7237
Individual Capability Statement: Research scientist in robotics, embedded systems, and communication theory with extensive experience in military applications.

Kitchen, Sarah
Email: snkitche@mtu.edu
Phone: 734-994-7236
Individual Capability Statement: I am a mathematician on a funded team that will combine mathematical, statistical, and robot simulation expertise in designing solutions to the SubT Challenge. In particular, the mathematical/statistical contributions will be applied towards optimal fleet selection and adaptive decentralized fleet control systems.

Middleware Technologies Co Ltd
Chumtong, Puwanan
Email: cpuwanan@gmail.com
Phone: 66980143233
Individual Capability Statement: A software robotics engineer with many years of experience in autonomous navigation and 3d sensing.

MissionTEQ
Capability Statement: The WolfPAK is an ultra-mobile canine mounted camera and interactive information system that provides real-time situational awareness and off-lead K9 command capabilities to K9 handlers and command centers at a remote and safe distance. The system is controlled by an intuitive user interface at the handler or command center.

Bentley, Dave
Email: dbentley@missionteq.com
Phone: 703-563-0699

Missouri University of Science and Technology
Capability Statement: Team consists of geotechnical and mining engineers, with interest in underground detection via drones and radar. Campus has an experimental mine for potential testing.

Lueking, Angela
Email: luekinga@mst.edu
Phone: 573-341-4778

Moye Consultants
Capability Statement: Boutique engineering firm, founded by former Navy officer with experience in sonar design and modeling, search theory, and earth sciences, and GIS, but now working in numerical modeling. Desires to understand problem better in order to develop methods to amalgamate acoustic resonance data and other, unrelated data to develop solutions.

Moye, Davis George
Email: moyeconsultantsreceipts@gmail.com
Phone: 850-445-1796

Mynaric USA
Capability Statement: Mynaric's communications technology employs free space optics (fiber optics without the fiber) for communications that are ultra-high speed, secure, resistant to jamming and interference, and difficult to detect or intercept. Laser communications quickly and securely transmit large amounts of data such as voice, HD video streams and LIDAR.

Fehrenbach, Joseph
Email: joseph.fehrenbach@mynaricusa.com
Phone: 256-429-9698

Mythic
Capability Statement: We are building a new chip dedicated to deep learning inference. Our chip and supporting software stacks leverages computation in analog memory to enable massive computation and low power solutions for neural network inference.

Chwastek, Matthew
Email: matthew.chwastek@mythic-ai.com
Phone: 650-278-8122

NASA
Capability Statement: Interested in the competition since NASA is working on a related challenge. Centennial Challenges is also working on a Space Robotics Challenge which could work in conjunction with the DARPA challenge.

Kim, Tony
Email: tony.kim@nasa.gov
Phone: 256-544-6217

Roman, Monsi
Email: monsi.roman@nasa.gov
Phone: 256-544-4071

National Taiwan Normal University
Baltes, Jacky
Email: jacky.baltes@ntnu.edu.tw
Phone: 204-474-838
Individual Capability Statement: I am the leader of the robotics lab, with more than 12 graduate students and about 30 undergrad students. We have participated successfully at various robot competitions such as FIRA HuroCup and RoboCup. I am also the President of the Federation of International Robot Sports Assoc. (FIRA), which is a robot competition with more than 1200 participants.

National University of Singapore

Ler, Wilson
Email: lws803@gmail.com
Phone: +65 92278861
Individual Capability Statement: Strong background in winning past robotics competitions: Robosub

Phua Zheng Jie, Marcus
Email: marcuszhengjie@gmail.com
Phone: +6597689404
Individual Capability Statement: Exposure to robotics and autonomous systems. Substantial programming experience and currently working on underwater autonomous sub-systems.

New York University
Laefer, Debra
Email: debra.laefer@nyu.edu
Phone: 929-248-2706
Individual Capability Statement: Geotechnical, remote sensing, and distributed computing expertise.

Neya Systems LLC
Capability Statement: Neya Systems LLC is part of the team headed by Endeavor Robotics and has been tasked to develop the autonomy components for the robots including planning, navigation, 3D mapping, map fusion, and world modeling. In addition, Neya Systems LLC will be developing the autonomy payloads (including sensor and computation).

Rybski, Paul
Email: paulr@neyasystems.com
Phone: 724-799-8078

Oceaneering
Capability Statement: Oceaneering provides solutions for complex operations in harsh environments from deep ocean depths to outer space. We have a breadth of expertise in remotely and autonomously operated vehicles, robotics, data collection and correlation as well as remote communications.

Cheramie, Jami
Email: jcheramie@oceaneering.com
Phone: 337-261-0660

Weaver, David
Email: dweaver@oceaneering.com
Phone: 443-459-3900

ODNI-NIC
Guitguiten, Garry
Email: heatherandgarry@gmail.com
Phone: 703-275-2830
Individual Capability Statement: I could provide structural infrastructure details and I could also state analysis of geologic conditions of any kind subterranean challenge. Historically, I am one of the most competitive science advisors in the history of the Office of Naval Research serving both the U.S. Fleet Forces Command and U.S. Submarine Forces.

OMICRON PLUS S.R.L.
Capability Statement: Omicron Plus SRL is a company founded to help researchers in research institutions and materialize their inventions and innovations. Also, our company offers solutions and studies to companies that want to solve some problems in research and technological development.

Radu, Valentin
Email: omicronplus.ro@gmail.com
Phone: +40 745 359 010

Open Geospatial Consortium
Capability Statement: OGC members develop, implement, validate, and deploy standards for geospatial information sharing and systems interoperation

Lieberman, Joshua
Email: jlieberman@opengeospatial.org
Phone: 617-431-6431

Open Robotics
Koenig, Nate
Email: nate@openrobotics.org
Phone: 650-450-9681

Orbit Inc.
Capability Statement: I am a past and future NASA Space Robotics Challenger. I'm currently developing an autonomous robotic arm for in-space satellite servicing and surface science and exploration through NASA solicitations.

Traore, David
Email: david@orbitzone.space
Phone: 775-345-3927

Oregon State University
Hollinger, Geoffrey
Email: geoff.hollinger@oregonstate.edu
Phone: 541-737-5906
Individual Capability Statement: Coordination and decision making for distributed networked multi-robot systems

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Parkland College
Sharma, Nishqa
Email: nishqas@gmail.com
Phone: 773-569-8137
Individual Capability Statement: Artificial Intelligence, Machine Learning, Computer Vision, Robotics.

Penguin Automated Systems Inc.
Capability Statement: Penguin has been working the field of robotic underground mapping for the last 20 years. Penguin robots have mapped 100 plus miles of mine tunnel, sewer pipe and urban underground structures.

Baiden, Greg
Email: gbaiden@penguinasi.com
Phone: 705-692-8748

Penn State University
Lintereur, Azaree
Email: atl21@psu.edu
Phone: 814-867-1783
Individual Capability Statement: Radiation detector specialist with muon detector development experience.

Poznan University of Technology
Walas, Krzysztof
Email: krzysztof.walas@put.poznan.pl
Phone: +48 616-652-809
Individual Capability Statement: Environment perception for robots using a sense of touch, vision and depth.

Presagis
Capability Statement: We offer products and services that allow manual and automated modeling of 3D maps and simulation databases. We have some basic tunnel modeling capabilities and would like to understand how they can be extended to be useful for the US government.

Blondin, Stephane
Email: stephane.blondin@presagis.com
Phone: 514-341-3874

Lavier, Sebastien
Email: sebastien.lavier@presagis.com
Phone: 514-995-5375

Qntfi, Inc.
Capability Statement: Rapid 3D mapping of cluttered, complex vertical and horizontal environments. Using SLAM-based laser scanning, capable of rendering high-fidelity point clouds & meshes of enclosed spaces and natural and man-made structures.

Gutelius, William
Email: bill.gutelius@qntfii.com
Phone: 703-577-4979

RazrPhish
Capability Statement: Provider of data and mapping fusion technology which allows real time rendering of picture/ video and radar/lidar data to create a virtual map of an area.

Grabowski, Tim
Email: tim.grabowski@razrphish.com
Phone: 413-883-5747

Red Sky Technologies SA de CV
Capability Statement: Experienced on robotics development and AI software, Also with previous experience on DARPA Robotics Challenge, and qualified as VRC contestant.

Madrid Gomez, Pedro
Email: 4x31m6@gmail.com
Phone: 939-275-5474

Resolved Analytics
Capability Statement: Artificial intelligence, algorithms research, development and deployment. Numerical physics modeling. Pattern recognition.

Bible, Stewart
Email: stewart@resolvedanalytics.com
Phone: 704-559-9560

Respec
Rouse, Nathan
Email: nathan.rouse@respec.com
Phone: 859-221-8797
Individual Capability Statement: I am a consultant in mining engineering and blasting. I have access to various underground facilities and experience in underground mapping, inspection, and blasting operations.

Rhea Space Activity
Capability Statement: Rhea Space Activity is interested in leveraging Particle/Astroparticle physics expertise to assist in understanding the topography of underground domains.

Lance, Cameo
Email: cameo.lance@rheaspaceactivity.com
Phone: 352-317-5341

Robotic Systems Lab
Hutter, Marco
Email: mahutter@ethz.ch
Phone: +41446327417
Individual Capability Statement: I'm PI of ETH-RSL (part of CERBERUS Team)

Robotics & Controls
Hong, Sanghyun
Email: shong7@ford.com
Phone: 313-323-6502
Individual Capability Statement: I do research and develop path planning/following algorithm and control algorithm for ground robots.

Robotika.cz
Capability Statement: We have relatively long experience with mobile robots (for details see https://robotika.cz) and SubT looks like interesting challenge.

Dlouhy, Martin
Email: md@robotika.cz
Phone: +420 604 377 599

Rocklore Exploration Services Limited
Craig, Drew
Email: drewcraig@rocklore.co.uk
Phone: 0044-7711-511-475
Individual Capability Statement: 25 years expereince in the minerals and mining sector. In parallel, 25 years experience as an Army Reservist with experience in GEO, HADR, CIMIC, Infra, and EOD.

Roke Manor Research
Capability Statement: The Roke Exploration Navigation System (RENS) is a single, independent, completely passive navigation technology that provides localization and mapping information for platforms and responders in subterranean scenarios.

Crackett, Hamish
Email: hamish.crackett@btinternet.com
Phone: +44 1794 833474

Crackett, William
Email: hamish.crackett@roke.co.uk
Phone: +44 1794 833474

Peddell, James
Email: james.peddell@roke.co.uk
Phone: + 44 1794 833668

Revell, James
Email: james.revell@roke.co.uk
Phone: +44 1794 833769

Scientific Systems Company, Inc.
Capability Statement: Provide mission autonomy that enables diverse collaborative unmanned systems to implement commander's intent, ensure mission effectiveness, and dramatically shorten operational timelines.

Johnson, Neil
Email: njohnson@ssci.com
Phone: 801-602-9193

Yu, Ssu-Hsin
Email: syu@ssci.com
Phone: 781-933-5355

Siemens Corporation
Capability Statement: Visual Technologies and Solutions; primarily computer vision and autonomous perception.

Arisoy, Erhan
Email: erhan.arisoy@siemens.com
Phone: 609-216-8025

Roy, Aditi
Email: aditi.roy@siemens.com
Phone: 609-216-1610

Sierra Nevada Corporation
Capability Statement: Obstacle detection and avoidance, 3D imaging radar, ultrawide band communications, data fusion

McIntyre, Trevor
Email: trevor.mcintyre@sncorp.com
Phone: 775-849-6596

Montgomery, Larry
Email: larry.montgomery@sncorp.com
Phone: 801-273-5529

Skyline Software Systems, Inc.
Capability Statement: Skyline Software provides a foundation 3D globe service to build, visualize, and analyze underground facilities in online or disconnected environments. Our innovative 3D geospatial visualization software is capable of generating, editing, publishing, streaming and viewing quality high resolution 3D geospatial models.

Gossard, Matthew
Email: mgossard@skylinesoft.com
Phone: 910-243-1556

Hilbert, Kristin
Email: khilbert@skylinesoft.com
Phone: 703-473-8848

Wheeler, Christopher
Email: wheelerc.ctr@jdi.socom.mil
Phone: 910-243-2532

Societas Analytics
Capability Statement: Subgen is our threat verification & situational awareness SaaS (and sonar pulse system). Unmanned & automatic, Subgen captures periodic sonar "snapshots" while our algorithms processes millions of diffs in milliseconds for real-time automated situational awareness at scale.

Lane, Gentry
Email: gentry@societasdata.com
Phone: 202-552-9435

South Dakota School of Mines and Technology
Ragi, Shankarachary
Email: shankarachary.ragi@sdsmt.edu
Phone: 605-394-4184
Individual Capability Statement: I am a researcher in the field of autonomous systems with focus on optimal decision making, sensor-data fusion, and swarm control. I have expert background on UAV autonomy, which has extensive applications in cave terrain mapping, trapped-human detection, harmful gas detection and source-location identification (for mining safety).

SPAWAR Atlantic

Carter, Josh
Email: joshua.a.carter@navy.mil
Phone: 843-564-8447

Livingston, Jason
Email: jason.livingston@navy.mil
Phone: 843-218-5409

Stargate Robotics
Capability Statement: 3D Modeling, Concept Design, Engineering, Unreal Engine

Menyuk, Oleg
Email: oleg.m.dev@gmail.com
Phone: 561-907-6543

Stevens Institute of Technology
Goel, Anand
Email: goelanand@gmail.com
Phone: 312-961-2513
Individual Capability Statement: I am an amateur science enthusiast. My expertise is in finance and economics but I have background in electrical engineering and computer science and am interested in learning domain-specific knowledge and collaborating with algorithm design.

SUNY Plattsburgh
Walters, Michael
Email: waltersmj@gmail.com
Phone: 518-564-3160
Individual Capability Statement: I teach robotics for SUNY Plattsburgh, and my specialty is metrology.

Tactical Electronics
Capability Statement: The CORE Tactical Camera System provides a tool to rapidly search and clear subterranean environments. Additional benefits include: • Thermal Fusion Technology • Secure network connectivity to stream video over Mesh Networks • Integrated with ATAK and GIS

Shultz, Dave
Email: dave.shultz@tacticalelectronics.com
Phone: 757-470-4164

Tebbs Lane LLC
Capability Statement: Systems Integration Sensors Position, Navigation, Timing Mesh Communications

Smith, James
Email: j.h.smith@ieee.org
Phone: 703-349-4207

The Construct
Tellez, Ricardo
Email: rtellez@theconstructsim.com
Phone: 687-672-123
Individual Capability Statement: I'm expert in ROS and Gazebo simulations

*Attendees listed gave permission via the registration website to be included in this contact list.

The Thistle Foundation
Capability Statement: This is a start-up non-profit with limited funding. I am a 100% SCCR Disabled Veteran utilizing my knowledge, skills, and abilities to full-fill your technical requests.

Thistle, David
Email: djthistle163@gmail.com
Phone: 210-609-8656

Third Space Automation Oy
Capability Statement: Robotics start up specialised in creating autonomous swarming simulations and complex algorithms for collaborative task completion between unmanned air and ground robots in network dead or hostile environments.

Varlet, Arshia
Email: arshiabasithvarlet@gmail.com
Phone: 00447500014730

Thomas Jefferson High School for Science and Technology
Capability Statement: Governors high school for science and technology, consistently ranking in the top 5 high schools in the nation, with two satellites in space and specialized research labs for prototyping and robotics development. Professional grade machining capabilities and access to necessary technology.

Phillips, Ethan
Email: 2019ephillip@tjhsst.edu
Phone: 703-975-6223

Tricolonization Foundation
Capability Statement: Underground sustainable development is part of the tricolonization project's long term goals and could be helped by winning this prize.

Bowdidge, Barry
Email: humanarium@hotmail.com
Phone: 619-581-8666

TU Freiberg
Capability Statement: Robotics in general, autonomous navigation, underground robotics, ROS, SLAM, own research mine

Loesch, Robert
Email: Robert.Loesch@tu-freiberg.de
Phone: +493731393519

Tullips & Green
Simone, Samuel
Email: Solomonhasid@gmail.com
Phone: 347-406-3715

UC Berkeley

Mueller, Mark
Email: mwm@berkeley.edu
Phone: 510-642-3270
Individual Capability Statement: Robotics, aerial robotics, control, path planning.

Zakhor, Avideh
Email: avz@berkeley.edu
Phone: 510-384-3272
Individual Capability Statement: I have been involved in indoor mapping since 2007 with funding from DoD and DoE. I built the first ambulatory backpack system for rapid 3D modeling of GPS denied environments such as indoors.

Ultra Electronics
Capability Statement: EMS has a product called RockPhone, which uses Magneto-Inductive ELFE frequencies for video and/or voice communications in tunnels, caves and high rises, and can be used to relay HF radio comms from these tunnels./buildings directly to command posts outside the barriers.

Tims, Robert
Email: bobgtims@optonline.net
Phone: 631-345-6200

Universidad de Malaga
Sanchez, Manuel
Email: mansanmon@outlook.es
Phone: +3466-408-6761
Individual Capability Statement: I'm an engineering student and this year, as my final degree project, and in collaboration with the Robotics and Mechatronics department of my university, I have developed and application using Gazebo to generate labeled point clouds from natural environments. I think the software/technology developed could be useful for the Challenge.

University of Alabama

Vikas, Vishesh
Email: vvikas@ua.edu
Phone: 205-348-1607
Individual Capability Statement: I am an assistant professor who works in the field of soft robotics (terrestrial locomotion of soft robots). Our robots can adapt and learn locomotion in unknown environments and I would like to explore if they can be used for subterranean locomotion.

Wall, Jacob
Email: jwall2@crimson.ua.edu
Phone: 865-336-0124
Individual Capability Statement: Team of engineers from different disciplines working together to create a subterranean mapping device.

University of Colorado
Humbert, Sean
Email: sean.humbert@colorado.edu
Phone: 303-492-8250
Individual Capability Statement: Autonomy, perception, communications and power solutions for long-term subterranean deployments.

University of Colorado Denver
Rorrer, Ron
Email: ronald.rorrer@ucdenver.edu
Phone: 303-315-7505
Individual Capability Statement: Drone power and communications.

University of Hawaii at Manoa
Song, Zhuoyuan
Email: zsong@hawaii.edu
Phone: 808-956-0807
Individual Capability Statement: I am supervising a project team consisting of undergraduate and graduate students working on designing a subterranean autonomous robot. We plan to enter the grand challenge with our design.

University of Melbourne
Capability Statement: The University has a broad depth of expertise to address the DARPA subterranean challenge and can provide optimised solutions in the face of uncertainty and practical but advanced mechanical, electronic and information systems.

Moshier, Andrea
Email: andrea.moshier@unimelb.edu.au
Phone: 828-242-1542

University of Michigan
Sharma, Prashin
Email: prashinr@umich.edu
Phone: 630-877-5206
Individual Capability Statement: My research is on fault tolerant capabilities of multirotor vehicles and contingency planning in case of emergency. And multirotor vehicles are one of the most likely platforms used for exploration of caves.

University of Nevada Las Vegas
Gower, Trevor
Email: gowert1@unlv.nevada.edu
Phone: 702-595-8757
Individual Capability Statement: Machine learning utilizing TensorFlow, Caffe, Theano, and deployment to embedded systems using Nvidia TensorRT.

University of Nevada, Reno
Alexis, Kostas
Email: kalexis@unr.edu
Phone: 775-682-6871
Individual Capability Statement: Research in autonomous robots. Representative of the CERBERUS team that is based on the collaboration between UNR, ETH Zurich, UCBerkeley, SNC and Flyability.

University of Nevada, Reno, cont.

Khattak, Shehryar
Email: shehryar.masaud@gmail.com
Phone: 775-990-3261
Individual Capability Statement: I am member of one of the funded DARPA teams.

Papachristos, Christos
Email: cpapachristos@unr.edu
Phone: 775-990-3192
Individual Capability Statement: CERBERUS team 2nd participant from UNR. Robotics research in perception, path-planning, control, and design of Micro Aerial Vehicles, with focus on systems and methods that enable autonomous localization, exploration, mapping and characterization of unknown, GPS-denied degraded visual environments.

University of Oxford
Fallon, Maurice
Email: mfallon@robots.ox.ac.uk
Phone: 788-093-5718
Individual Capability Statement: PI of Dynamic Robotic Systems group, researching legged mobility and navigation with quadruped robots. Key participant in the DARPA Robotics Challenge of MIT.

University of Pennsylvania
Taylor, CJ
Email: cjtaylor@cis.upenn.edu
Phone: 215-898-0376
Individual Capability Statement: I am the leader of one of the DARPA funded teams that aims to implement a team of robotic agents consisting of legged and flying vehicles that will take on the challenge. In addition to the University of Pennsylvania our team includes 2 corporate partners, exyn Technologies and Ghost Robotics.

University of St. Gallen
Burri, Thomas
Email: thomas.burri@unisg.ch
Phone: +4915152523648
Individual Capability Statement: Social science researcher who researches the law and ethics of robotics and AI

University of Vermont
Huston, Dryver
Email: dryver.huston@uvm.edu
Phone: 802-656-1922
Individual Capability Statement: Our group has been active in mapping underground infrastructure using above ground penetrating radars combined with photogrammetric position registration and augmented reality presentation.

University of Zaragoza
Riazuelo, Luis
Email: riazuelo@unizar.es
Phone: 876555459
Individual Capability Statement: Autonomous vehicles in different applications: logistics, intervention and rescue robots, intervention in confined environments, intelligent vehicles. Ad-Hoc networks oriented to the work of several activities like rescue, surveillance, exploitation, emergency, either for human or robot teams.

University Pablo de Olavide
Alejo, David
Email: daletei@upo.es
Phone: 034-667-293034
Individual Capability Statement: Ph.D. on collision resolution for teams of multiple UAVs. Experience in multiple fields in robotics such as SLAM, navigation and machine learning based navigation and localization algorithms. We are in the Challenge for Sewer Inspection inside the European funded project Echord++ (http://echord.eu/essential_grid/siar/).

Unmanned Aerial Services Inc.
MacKinnon, Matt
Email: matt@uasinc.ca
Phone: +1 249 878-0582
Individual Capability Statement: I personally represent and fly equipment underground for companies that are participating in the trials and have been asked if I would like to attend to view the event and the various units in action. Additionally, my company has also offered various real world mine locations that I have standing relations with who would allow the use of their facilities.

VersaTOL
Capability Statement: Small, and powerful sUAS flight controller/mission computing suite for drone AI developers. Fully integrated, turn-key sUAS and rover test beds for rapid integration, test and validation of next generation mapping/AI sensors and algorithms.

Corban, Lawrence
Email: LC@versatol.com
Phone: 770-681-2301

Neilson, Dakoda
Email: dn@versatol.com
Phone: 404-966-7058

Virginia Tech
Leonessa, Alexander
Email: aleoness@vt.edu
Phone: 540-231-3268
Individual Capability Statement: Our proposed solution involves the use of a distributed network of blimps for cave mapping and exploration.

Wired magazine
Simon, Matt
Email: matthew_simon@wired.com
Phone: 408-564-1289

Wolf Den Associates
Capability Statement: QRC mission systems integration for both avionics and payload components of group 1 and 2 UAS. Multidisciplinary team from Experimental Aerospace, Robotics, 3rd-Wave Machine Learning, and Software Radio fields.

Kline, Ian
Email: ian@wolfdenassociates.com
Phone: 571-253-2522

*Attendees listed gave permission via the registration website to be included in this contact list.