

Matt Anderson

Robotic Systems and Autonomy
Air | Land | Sea

System Architecture for complex robotics systems,
specializing in extreme environment robotics

Supporting Science through robotic sensor / payload designs
and deployment to harsh environments

Integration and Design of sensor and autonomy stacks
under challenging size, weight, and power constraints

Leading Teams of any size towards success, from project
conception through to field demonstrations

Executing Field Test Campaigns from the depths of coal
mines to the skies over mountains and beyond line of sight

Ensuring Safety through years of experience in experimental
robotics coupled with ongoing training

Test Pilotage for anything that flies, floats or drives

Capability Multiplication through a width breadth of
knowledge in cutting-edge research and project support

Skills

- ROS1/2, MATLAB, C++, Python, Docker, bash, git
- ArduPilot, PX4, Mission Planner, qgroundcontrol
- SolidWorks, Inventor, KiCAD, rapid prototyping
- Part 107 (FAA), Fixed-Wing Gold Wings (MAAA)
- First Aid / CPR (American Red Cross)

Experience

Staff Scientist (2019 – Current)
California Institute of Technology

Post Doc (2018 – 2019)
Jet Propulsion Laboratory

Researcher (2018)
The University of Sydney / ACFR

Education

Ph.D (System Identification)
University of Sydney /
University Libre de Bruxelles

B. Eng (Hons. I, Aeronautical)
University of Sydney



Up for a challenge?
Let's succeed together
<https://andersonrayner.github.io/>
matt.jl.anderson@gmail.com

Gas sampler design for volcanic fumaroles



System architecture and team management



Aircraft design



Payload design and operations



Quadcopter systems



Multi-UAS supporting SAR



Payload design and integration

