Kent Roberts

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EDUCATION

California Polytechnic State University, San Luis Obispo (Cal Poly) San Luis Obispo, CA
Master of Science in **AEROSPACE ENGINEERING**, January 2022 GPA: 3.5

- Thesis subject: *Aeroelasticity of Small-Scale Aircraft*

University of California – Santa Cruz Santa Cruz, CA
Bachelor of Science in **PHYSICS,** June 2019 GPA: 3.8

- Minor in Applied Mathematics
- Founder of the UCSC Rocketry team (NASA SL)

ENGINEERING EXPERIENCE

ManTech – Launch Systems El Segundo, CA
Systems Analyst Jun. 2020 - Current

- Developed tools for the automation of early **National Security Space Launch (NSSL)** early payload integration studies leveraging modern simulation and wrapping tools (ModelCenter, Cameo, MATLAB, STK, AFSIM) supporting SMC/Launch Enterprise Systems Engineering.

General Atomics EMS (Electromagnetic Systems) San Diego, CA
Optical Engineering Intern Jun. – Sept. 2018

- Designed and achieved first light of a novel **Predator drone tracking and targeting system, a high-resolution flash 3D LIDAR** system based on polarization modulation.
- Assisted with ultra-short laser pulse research, clean room experience

Project Engineering Intern Jun. – Sept. 2017

- Post flight analytics of surveillance data supporting Due Regard Radar (DRR) system testing.

Systems Engineering Intern Jun. – Sept. 2016

Cal Poly SLO Engineering Department San Luis Obispo, CA
Teaching Assistant Sept. 2019 - Current

- Taught junior/senior level laboratory courses in fluid mechanics, space propulsion, structures, programming, etc.
- Bipropellant rocket engine operation, wind tunnel operation (supersonic and low speed)

CERTIFICATIONS

- Security Clearance: Secret (CAC, etc.)
- STK Level 1
- Tripoli Level 1 High Power Rocket Certification

SKILLS / INTERESTS

Programming languages:	MATLAB, Python, C++, Latex, SysML
CAD Software:	Solid Works, NX, SpaceClaim, Inventor, PTC Creo, Siemens NX
Analysis Tools:	NX NASTRAN, FEMAP, FEMAP Aeroelasticity Package, STAR CCM+, STK, ANSYS, ModelCenter, Zemax OpticStudio
Projects/Clubs:	FSAE (Aero & Body Panel lead), NASA Student launch (Founder & President), Society of Physics Students, DBF, HACKATON, Planetary Society, Mars Society, FIRST Robotics Volunteer