Walker Kehoe
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SUMMARY:

Graduating Aeronautics & Astronautics Master's student with two years' professional experience delivering impact for Fortune 100s and the U.S. Government in the machine learning/analytics space. More recently, I built the smallest satellite with three axis attitude control at Stanford. Currently, I'm building a rocket engine in my garage.

PROJECTS:

Liquid Oxygen/Methane Rocket Engine
- Designed a 640 N thrust, restart capable LOX/CH4 rocket engine with additively manufactured coaxial injector and augmented spark igniter (ASI) components as part of a team of 9 students. Passed Critical Design Review (CDR) before project was cancelled by Stanford administration due to COVID-19 schoolwide shutdown.
- Singlehandedly building and testing ASI system in a garage following project's cancellation with the school.

PocketQube Satellite Design/Build/Fly
- Developed a 5 x 5 x 5 cm satellite which launches on a SpaceX rideshare mission in Q4 2020 and will set a record as the smallest satellite with 3 axis attitude control (via magnetorquers).
- Responsible for the following tasks: flight software (written in CircuitPython), hardware in the loop simulation, environmental testing, thermal analysis (using ANSYS).

Stanford Rocketry Club (SSI) Liquid Engine Team
- Developed a 1.5 kN thrust nitrous oxide/kerosene bipropellant rocket built to compete in IREC and FAR MARS student rocketry competitions.
- Leveraged DFM best practices in redesigning and machining key combustion chamber and tank components; performed cold flow and hydrostatic ground testing.

WORK EXPERIENCE:

Booz Allen Hamilton (2015 – 2018)   Washington, DC
Senior Consultant – Data Solutions and Machine Intelligence Group (2017-2018)
- European Pharmaceutical Company
  - Led a team of three to develop and implement a demand forecasting deep learning model in Tensorflow that improved the client's next month sales prediction accuracy by an average of 20% across 25 products.
- U.S. Government
  - Developed a computer vision capability in Python that resulted in $3 million in cost savings.
  - Led a team of five to build an R Shiny dashboard used for optimal resource planning.

Consultant – NextGen Analytics Group (2016-2017)
- Fortune 100 Energy Company
  - Led a team of three to build a data solution that saved 35 person-years of efficiency.
  - Led the recruiting, onboarding, training and technical mentorship of new team members.
- Wrote a proposal for a >$10 million U.S. government contract for which Booz Allen was officially selected.

Internships – Strategic Innovation Group (Summer 2015, Spring 2016)
- Fortune 100 Entertainment Firm
  - Developed an algorithm to discover new musical artists and predict their future success.
- Pitched an idea and was chosen for the highly selective (10%) spring internship program.

EDUCATION:

M.S. Aeronautics and Astronautics	Stanford University	2018 – 2020
B.S. Mechanical Engineering	Tufts University	2012 – 2016

Courses: Propulsion System Design, Spacecraft Design, Combustion, Hypersonics, Advanced Propulsion, Physical Gas Dynamics, Compressible Flows, Heat Transfer, Optimization, Decision Making Under Uncertainty, Dynamics, Vibrations, Controls, Structures, Machine Learning