

WORK EXPERIENCE:

SpaceX (2020 – Present)

Boca Chica, TX

Build Engineer II – Starship (2021-Present)

- Ownership of orbital Starship final integration and launch pad testing
 - Coordinated between responsible engineers, flight control and technician teams to ensure a rapid and successful build and launch campaign.
- Responsible engineer for tank ullage gas reaction control nozzle
 - Designed, built, analyzed and led the testing campaign to characterize performance and generate margins on the RCS nozzle.

Build Engineer – Starship (2020-2021)

- Responsible engineer for orbital Starship raceway system
 - Designed and built an assembly of tubes, brackets, fluid connections and thermal protection to transport multiple species of gas between the forward and aft end of the rocket.
 - Performed thermal, fluid and structural analysis to generate safety margins.
 - Designed and ran a test campaign to qualify a custom flange for flight.
 - Reduced part count by 50% and install time by 70% compared to the suborbital raceway.
- Automated plasma cutting on vehicle tank sections using Kuka robots, saving 6 hours of build time and eliminating all defects.
- Managed the build and test campaign for suborbital Starships 5 through 16 as part of an engineering team of 10.
 - Individually responsible for build of engine feed system, igniter system, engine control trays, pneumatics and reaction control system. Created tooling, instructions and processes for technicians to ensure smooth build of the vehicles.
 - Introduced a software tool that increased team efficiency by 20%, enabling a faster build.

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
B.S. Mechanical Engineering

Stanford University
Tufts University

2018 – 2020
2012 – 2016

PROJECTS:

PocketQube Satellite Design/Build/Fly

- Developed a 5 x 5 x 5 cm satellite which, when launched, 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.