Sujit Shivaprasad

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EDUCATION

PURDUE UNIVERSITY
BS Aeronautical and
Astronautical Engineering
May 2017

WESTLAKE HIGH SCHOOL
May 2013 | Austin, TX

LINKS

LinkedIn: **sujitshivaprasad**
Github: **sujitshivaprasad**

COURSEWORK

UNDERGRADUATE
Aeromechanics
Thermodynamics
Linear Algebra
Differential Equations
Aerospace Systems Design
Mechanics of Materials
Fluid Mechanics
Structural Analysis
Signals and Systems
Control Systems Analysis
Dynamics and Vibrations
Flight Dynamics
Data Science

SKILLS

PROGRAMMING
Experienced in:
Ada • Fortran • Python
Java • Matlab • C
C++ • LaTeX • CATIA
Abaqus • LS-Dyna • Solidworks
Bash
Familiar:
MySQL • ANSYS Fluent
HTML • Visual Basic

ACTIVITIES

• Purdue Zero Gravity Flight
Experiments
• Purdue EPICS

EXPERIENCE

CONTROL SYSTEMS ENGINEER Rolls-Royce
July 2017 – Present | Indianapolis, IN
- Systems/Software engineering for civil and defense aircraft engine control systems meeting DO-178b guidelines.
- Solved issues reported in the field by duplicating engine problems, and proposing software solutions for the T56 engine on the Northrop Grumman E-2D Advanced Hawkeye.
- Developed requirements, analyzed engine control system software written in Ada, and simulated aircraft behavior on a real-time simulator for validation.
- Created, modeled and simulated engine control system behavior using BEACON.

SIMULATION ENGINEERING CO-OP Kinetic Vision
May 2016 – Aug 2016 | Cincinnati, OH

- Finite Element Analysis (FEA) of various consumer products using Abaqus and LS-Dyna operated on Linux servers on High-Performance Computing systems.
- Experience meshing using Altair HyperMesh and CATIA.
- Developed FEA automation tools and algorithms such as meshing and exporting simulation results with Python scripts, utilizing various python packages such as NumPy and SciPy.

INTERN | Center for Space Research, The University of Texas at Austin
May 2012 – Aug 2012 | Austin, TX
- Analyzed and investigated geographical data from the IceSat-1 satellite to optimize the successive satellite.

RESEARCH

MACHINE-TO-MACHINE LAB | Purdue University
Nov 2015 – May 2016 | West Lafayette, IN
Under the supervision of Dr. Eric Matson, developed an autonomous drone to analyze chemical plumes in explosions and relayed the information to a ground station using the Pixhawk autopilot.

AIR TRANSPORTATION MANAGEMENT LAB | Purdue University
May 2014 – Dec 2014 | West Lafayette, IN
Under the supervision of Dr. Dengfeng Sun, conceptualized and designed a flight simulation tool for optimizing traffic flow management using parameters such as aircraft model and ground speed to calculate flight time and fuel burn.