

# Sujit Shivaprasad

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## EDUCATION

### PURDUE UNIVERSITY

BS IN AERONAUTICAL AND  
ASTRONAUTICAL ENGINEERING  
Expected May 2017  
Minor in Mathematics

### WESTLAKE HIGH SCHOOL

Grad. 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  
Controls Systems Analysis  
Dynamics and Vibrations  
Flight Dynamics  
Data Science

## SKILLS

### PROGRAMMING

Experienced in:  
Java • Matlab • C  
Python • C++ •  $\text{\LaTeX}$   
Abaqus • LS-Dyna • Solidworks  
Bash • Visual Basic • CATIA  
Familiar:  
MySQL • ANSYS Fluent  
HTML

## ACTIVITIES

- Purdue Zero Gravity Flight Experiments
- Purdue EPICS

## EXPERIENCE

### SIMULATION ENGINEERING CO-OP KINETIC VISION

May 2016 – Aug 2016 | Cincinnati, OH

- Finite Element Analysis (FEA) of various 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.

### PURDUE EPICS STUDENT ENGINEER

Spring 2014 – Present | West Lafayette, IN

- VOSS GE Engine Blade Display (Fall 2015, Spring 2016): Design Lead, in charge of designing and building an educational display for a GE-90 engine blade.
- AAEE Mars Rover (Spring 2014, Fall 2014): Developed and programmed the electrical system a life-size Mars Rover, worked with Arduino and Arduino C to code and communicate with the Rover and Robotic Arm.

### 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.

## AWARDS

- |         |   |
|---------|---|
| 2015-17 | Purdue EPICS Undergraduate Teaching Assistant |
| 2014-16 | Purdue EPICS Ambassador                       |
| 2013-14 | J Bonner Wampler Alumni Scholarship           |
| 2012    | NASA High School Aerospace Scholar            |

## SOCIETIES

- |         |          |   |
|---------|----------|---|
| 2015-16 | Purdue   | Drone club  |
| 2014-15 | National | The American Institute of Aeronautics and Astronautics (AIAA) |
| 2014-15 | Purdue   | Hackers club  |