

Tarun Punnoose

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EDUCATION

STANFORD UNIVERSITY

ELECTRICAL ENGINEERING

Expected Jun 2020 | Stanford, CA

Cum. GPA: 3.93/4.0

ACTIVITIES

- Stanford Solar Car
- Stanford Climbing Wall

THOMAS JEFFERSON HIGH SCHOOL FOR SCIENCE AND TECHNOLOGY

Graduated Jun 2016 | Alexandria, VA

ACTIVITIES

- Excelsior Aerospace Club
- Hackathons

COURSEWORK

COLLEGE

- ENGR 105 - Feedback Control Design
- AA 274 - Principles of Robotics and Autonomy
- EE 101A - Circuits
- EE 102A - Signals and Systems
- ME 210 - Intro to Mechatronics
- ME 123 - Computational Engineering
- ME 80 - Mechanics of Materials

SKILLS

PROGRAMMING

- Matlab
- Python
- C

GENERAL

- Composites Manufacturing
- Digital/Analog Electronics
- CNC Machining
- HAM Radio License
- Student Pilot

CAD/CAM

- CATIA 3D Experience
- SolidWorks
- Fusion 360

EXPERIENCE

JOBY AVIATION | AIRFRAME TEAM INTERN

Jun 2018 – Sept 2018 | Santa Cruz, CA

- Process development and tooling for composite stiffeners
- Design of composite tooling and jigs
- Help define and implement instrumentation procedures for the airplane
- Helping refine the control surface actuators
- Helped debug issues with a 5 axis waterjet
- Designed and manufactured a custom oven

STANFORD SOLAR CAR | MECHANICAL TEAM

Sep 2016 – Jun 2018 | Stanford, CA

- Designed and manufactured canopy latching system
- Machined hardpoints, linkages, inserts, fixtures and other parts to tight tolerances with a CNC mill
- Created fixture setup to accurately assemble topshell chassis
- Helped complete composite layups for the car's aerobody
- Helped construct and manufacture various mechanical systems on the car

TIGER INNOVATIONS | INTERN

Jun 2016 – Sep 2016 | Herndon, VA

- Tested and debugged an issue with the RF IC of a small satellite
- Modified and checked multiple RF IC system parameters
- Wrote software to test fixed RF system

NASA GODDARD | INNOVATION LAB INTERN

Jun 2015 – Jul 2015 | Greenbelt, MD

- Helped design and build hardware surrounding a small scale commercial robotic arm
- Worked with machinists and technicians to create parts
- Created an image processing program with OpenCV that gave target coordinates to the arm
- Completed the lower level electronics and programming to interface with the arm

US NAVAL OBSERVATORY | ASTRONOMICAL APPLICATIONS INTERN

Jun 2014 – Aug 2014 | Washington, DC

- Developed and tested astronomical data calculators for the data services page
- Completely remade the Phases of the Moon Calculator and the Complete Sun and Moon Data for One Day services
- Made these two data services into APIs that return JSON
- <http://bit.ly/AAMoonPhase> and <http://bit.ly/AARiseSet>
- Used 6" refracting telescope to measure sunspot number for AAVSO

TJ EXCELSIOR AEROSPACE CLUB | CO-PRESIDENT

Sep 2014 – Jun 2016 | Alexandria, VA

- Led club in aerospace related competitions, projects, and outreach activities
- Compete in college level rocketry competition, Battle of the Rockets - Mars Rover Challenge
- Led rover (deployed from rocket at apogee) design and construction team
- Part of rocket design, build, and assembly team