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AARAV BALSU

Education

Northeastern University – M.S. Engineering Management, GPA: 4.0 ***September 2017 – May 2019 (est.)***
University of Illinois at Urbana-Champaign – BSc. Aerospace Engineering ***August 2013 – May 2017***
American International School of Abu Dhabi – International Baccalaureate Program ***September 2009 – May 2013***

Skills

CAD
Siemens NX 9.1, Creo, SolidWorks

Computer Programming
C++, MATLAB, Simulink

General Computer Proficiencies
Linux, Mac OS X, Microsoft Windows, LoggerPro, NX Thermal, Microsoft Office (Word, Excel, PowerPoint, etc.),
Networking, Information Security
CCNA, OSCP (in progress)

Relevant Coursework
Aerospace Controls Systems
Orbital Mechanics, Optical Remote Sensing, UAV Nav&Control, Operations Research, Project Management, Lean Applications,
In progress: Data Mining, Economic Decision Making

Technical Experience

CO-FOUNDER – Dreadnought Robotics, University of Illinois – Champaign, Illinois ***January 2016 – January 2017***

- Built an aerial fixed-wing UAS from scratch, named SkyButler, to deliver a safer, cheaper, more hackable aerial robotic experience to consumers.
- Participated in COZAD entrepreneurship competition against other teams to secure a $150,000 grand prize.
- Led a team of six other undergraduate students from various engineering disciplines to create SkyButler, learning various skills in the process related to controls, structural integrity, material science, and aerodynamics.

PROJECT ASSISTANT – University of Illinois - Champaign, Illinois ***May 2015 – September 2015***

- Assisted in the Lower Atmospheric Ionospheric Coupling Experiment (LAICE), a CubeSat project in collaboration with Virginia Tech.
- Gained valuable experience in understanding space based thermal simulation, signals processing, radio operation, and vacuum chamber optimization for the project.
- Led the team in charge of creating the electrical connections between the various subsystems of the nanosatellite.

PROJECT ASSISTANT – University of Illinois - Champaign, Illinois ***September 2014 – January 2015***

- Acted in close collaboration with team members to develop a cost-efficient propulsion system for a predicted NASA mission to Mars as part of the Revolutionary Aerospace Systems Concepts Academic Linkage (RASC-AL) program.
- Gained technical insights into structural engineering, material design, deep space radiation, and extended interplanetary travel.
- Personal focus on the structure and material components of the transfer vehicle, allowing for a greater appreciation for and understanding of composite materials such as Nextel, Vectran, Kevlar, Combitherm, etc.

Professional Experience

STUDENT TECHNICIAN – ResNet Resource Center – Boston, Massachusetts ***December 2017 – Present***

- Resolving technology issues for students and gaining valuable operations and leadership experience with a small, agile technical support team.

Extracurricular Experience

DOG SOCIALIZER– Champaign County Humane Society - Champaign, Illinois ***June 2015 – May 2017***

TEAM MEMBER – Engineering Ambassadors – Champaign, Illinois ***April 2014 – May 2017***

- Gained experience with effective technical communication and public speaking.
- Participated in STEM outreach to underrepresented demographics in Illinois middle and high schools.

LinkedIn: https://www.linkedin.com/in/aaravbalsu **GitHub**: https://github.com/aaravbalsu