Sahil Farishta

sahilfarishta.com

Education

University of Michigan — Ann Arbor, MI

Master of Science in Engineering in Computer Science Engineering — *May 2021*
Bachelor of Science in Engineering: Computer Science; Bachelor of Science in Engineering: Aerospace Engineering — *May 2020*
Minor in Mathematics; Engineering Honors; Summa Cum Laude

Experience

Northrop Grumman

Future Technical Leader (FTL) — *August 2022 - Present*

- FTL rotation program accelerating development of technical and leadership skills with focus on System Engineering
  Attending leadership workshops, conferences, and working through technical challenges to refine skillset
- Productizing computer vision system to detect and classify UAVs. Led design of system tests and dataset curation
  Researching auto zoom, focus, and image enhancement methods to improve image quality and model accuracy
  Lead systems engineering with mentorship from senior technical leader
- Developing reinforcement learning models to monitor and characterize the Radio Frequency (RF) spectrum

Software Engineer - Mission Robotics Vehicle(MRV) /Mission Extension Pod(MEP) — *May 2021 - July 2022*

- Lead software development for MEP Star Trackers, Docking Camera, Capture Mechanism, and Antenna Thrusters
- Designed flexible framework for register management with intention to be reusable on future missions
- Worked with various subsystem leads to design interface specifications for software development

Software Intern — *Summers of 2016-2020*

- Researched multi-agent reinforcement learning algorithms to determine potential applications into baseline
- Developed software for a suite of intercommunicating, multithreaded programs spanning multiple languages

EECS 484 - Database Management Systems — University of Michigan

Graduate Student Instructor — *August 2020 - May 2021*

- Senior level course introducing students to database management systems considering implementations and usage
- Managed team of undergraduate instructors, developing assignments and exams while ensuring smooth operations
- Taught weekly discussion sections while also hosting office hours to help students with course content and assignments

Michigan Exploration Lab (MXL) — University of Michigan

Undergraduate Research Assistant — *October 2016 - May 2020*

- Research group building satellites along with payloads for High Altitude Balloons(HAB)
- Led software work for MC-9 satellite designed to test piezoelectric actuators in low Earth orbit
- Developed software and helped with operations post launch for TBEx satellites designed to study bubbles in ionosphere

Students for the Exploration and Development of Space (SEDS) — University of Michigan

Head of Projects — *April 2019 - April 2020*

- Managed all project teams in the organization ensuring timely progress is being made and impediments are resolved
- Organized inaugural Space Symposium Day - conference showcasing space work at the university with corporate speakers

Collaborative Lab for Advancing Work in Space (CLAWS) — University of Michigan

AI Lead, System Administrator, Software Lead — *October 2018 - May 2021*

- Wrote winning proposals for NASA SUITS and X-HAB challenges to develop Augmented Reality (AR) app for astronauts
- Established robust multi-threaded infrastructure for AR application to be used in current and future CLAWS applications
- Developed Conversational AI assistant to help astronauts complete their tasks and retrieve information
- Created and maintained a secure server hosting multiple virtual machines and webservers
- Trained and mentored other members of the team in both technical and non-technical skills

Honors and Awards

- **BRAVO Award**: Internal Northrop Grumman recognition from program management for excellent work with monetary award
- **Dean's Honor List (6 times)**: Awarded for taking 12 or more credits with a GPA of 3.5 or better
- **EECS Scholar**: Awarded for being an EECS Senior with a GPA greater than 3.9 as of Fall 2018
- **Boeing Endowed Scholar**: Awarded by Boeing and the College of Engineering in recognition of academic achievements

Skills

- **Languages**: C, C++, C#, CSS, Golang, HTML, Java, Javascript, JQuery, MATLAB, OCaml, PHP, Python, R, Rust, SQL
- **Tools**: Deepstream, Docker, GDB, Git, Microsoft Mixed Reality Toolkit, Microsoft Office, PyTorch, Rasa, STK, TensorFlow, Unity, Visual Studio