



**Shuheng Liu** DOB:11/13/1997| Tel:(0086)18964702918| shuheng.liu@qq.com

Aerospace Software Engineer. Experience in Surf-A demo SW develop; Primus Epic Modular Avionics display, control, graphics SW requirement and code development; Flight data decode, search and visualization on PC; CNS product BITE requirements and code development; Primus Epic system safety; FMS, Displays Test Procedures; Prepar3D Flight Simulation; Mechanics

### Education

<b>University of Michigan-Ann Arbor</b>	2020~2021	Master, Aerospace Engineering	GPA: 3.93, CFD, propulsion
<b>University of Michigan-Ann Arbor</b>	2018~2020	Bachelor, Aerospace Engineering	GPA: 3.94, Control, Systems
<b>Shanghai Jiaotong University</b>	2016~2020	Bachelor, Mechanical Engineering	GPA: 3.61, Mechatronics

### Work Experience

#### **Honeywell Aerospace** (2021/8~now)

*Software Engineer I, Software Engineer II*

- CIIE Demo SW for Honeywell Surf-A
- Primus Epic: Display, Touchscreen requirement and code; build and test SW; Design and execute test cases
- Flight Data Tool: Decode, search, export and visualize flight data; Architect Front-End and Back-End connection
- CNS product: BITE requirement and code; build and test BITE; Train foreign on-board colleagues
- System Safety: Fault Tree Analysis, Common Mode Analysis and System Safety Assessment. SSA Automation Tool
- Test Procedures: NGFMS Acceptance Test Procedures, Primus Epic Display and Control Equipment Level Test Procedures
- Avionics AI: Incorporate TensorFlow model on PC cockpit simulation with Prepar3D flight simulation
- Integrated Flight Management and Control system: Model-based Flight Control, Aircraft flight dynamics identification

#### **University of Michigan-Ann Arbor** (2019/5~2019/12)

*Undergraduate researcher*

Study cycle-to-cycle variation in internal combustion engine by machine learning.

1. Identify and analyze anomalous cycle 2. Verify the overall stability of the entire cycles 3. Detect by pressure monitoring

Research on non-unique solution in transonic flow based on STAR-CCM+:

1. Verify the existence of non-unique solution in transonic flow 2. Discover the effect of mesh resolution and shape on non-unique solution 3. Find out unsteady simulation helps to get unique solution 4. Compose a final report

#### **Shanghai Jiaotong University** (2017/5~2018/8)

*Mechatronic Engineering intern*

Design and manufacture mechanical prototype, build and test control program to complete designated tasks with team:

Paper bridge and mechatronic crane; Multi-pingpong ball picking machine;

Robotic arm with soft robotic claw; Transformable wheel; Make both final report and presentation for each task

### Honor

Date	Honor	Nominator
11/12/2024	Bravo Award for 2024 CIIE Surf-A demo	Direct Manager
5/29/2024	Bravo Award for TXD BITE FCI Software Development	Program Manager
5/27/2024	Bravo Award for Safety Automation Tools	Senior Safety Engineer
4/11/2024	Outstanding Young Engineer	Honeywell Aero China CTO
10/29/2023	Bravo Award for FLIGHT tool	Honeywell US Manager
1/28/2023	Bravo Award for Winning Award for CA22 Radio Tuning	Direct Manager
2017, 2018, 2019	Dean's List – top 20%	UM, SJTU
2017	Excellent undergraduate student scholarship of Shanghai Jiaotong University	SJTU

### Skills

Programming	MATLAB, C/C++, Python, C#, Javascript Full Stack
Engineering	AUTOCAD, UG, CATIA, IBM DOORS, DDC-I Deos
Certificates	Six Sigma Green Belt, DO-178 training, High School Teacher