Kaiqun Peng

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EDUCATION

Georgia Institute of Technology

Aug 2018 - Present

• MS in Aerospace Engineering

Georgia Institute of Technology

Jan 2018 - Aug 2020

• BS in Aerospace Engineering

GPA: 3. 89 (High Honors, Dean's list)

• Minor in Physics

RESEARCH

Battery Safety Research

May 2019 – Dec 2019

Undergraduate research

- Research peers' articles from internet and review the progress on this topic
- Design and perform experiments to exam the reactions of the lithium-ion battery under extreme conditions.
- Summary and organize all the data and prepare a formal report or ppt and report to the lead professor

Visualization of the Electrified Aircraft Propulsion

May 2020 - Aug 2020

Research Assistant

- Worked with a team on visualize and predict the performance of the electrified aircraft propulsion system
- Gathered articles from website and summarize the information collected
- Using MATLAB to create a code which can predict the key parameter by year 2050
- Collect codes generate interactive dashboard

PROJECTS

Boeing AerosPACE Drone Design Project (\$5,000 Sponsorship)

Aug 2019 – May $\overline{2020}$

Mechanical Lead

- Selected as one of 11 students from Georgia Tech to cooperate across universities in drone design
- Researched and evaluated stakeholders, resulting in choosing the Mission Aviation Fellowship
- Lead team to finalize the design coefficients by choosing airfoil design and using wind tunnel testing
- Stabilize the momentum with AVL; design and assemble the model using SolidWorks & 3D-Experience
- 3D-print and laser-cut parts with plywood and foams; check and test dimensions for assembly

SKILLS

- Aerospace Engineering: Aerodynamic forces (lift, drag, aerodynamic center, subsonic and supersonic flow), vehicle performance analysis (flight endurance, flight speed, force balancing, take-off and landing distance, rotorcraft behavior), fuel consumption, method of design, vibration and stability, dynamics, statics, torques, stress and strain
- **Economics:** Basic economic knowledge; Rational decisions with limited information; Predict opponent's or other companies' strategy and make rational strategy based on game theory; Cost estimation for engineering and cost reduction
- Language: Native Chinese speaker, fluent English; Technical writing in both languages, beginner level Japanese
- Communication: Public speaking; Formal academic presentations; tutoring
- **CFD:** Familiar with the basic CFD theory and grid generation. Able to perform CFD stimulation for non-complicated geometry.
- Tools: MATLAB, Python, Solidwork, Inventor, Microsoft Office, AVL, Analysis Fluent.