RANNIE DONG

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EDUCATION

Cornell University, College of Engineering, Ithaca, NY

Master of Engineering in Mechanical Engineering — **Expected May 2018**
Bachelor of Science in Mechanical Engineering, **GPA 3.30** — **May 2017**
Sibley School of Mechanical and Aerospace Engineering Outstanding Senior Award — **2016 – 2017**

Selected Coursework: Innovative Product Design via Digital Mfg. • Uncertainty Analysis in Engineering
Finite Element Analysis for Mechanical and Aerospace Design • Human-Robot Interaction

SKILLS

Technical: MATLAB, Python, SolidWorks, Autodesk Fusion 360, AutoCAD, ANSYS, LaTeX, machining, Microsoft Office
Language: Mandarin Chinese (fluent), Spanish (intermediate), French (basic)

RESEARCH

Autonomous Bike Team
Fall 2015

- Designed mount for Inertial Measurement Unit (IMU) for better motion readings.
- Rewrote Python code for IMU calibration to zero an unstable horizontal angle.

EXPERIENCE

GE Aviation
Lynn, MA
Design Intern
Summer 2016

- Constructed axial stack-up for T64 engine to substantiate change in design in 4 stages of compressor vanes resulting in $50K cost reduction.
- Analyzed data of coordinate-measuring machines to determine why actuation rings were often manufactured out of tolerance.
- Established requirements for 2 Vendor Substantiated Engineering approvals to allow shipment of 144 compressor blades and 206 compressor vanes.

GE Aviation
Evendale, OH
Supply Chain Intern
Summer 2015

- Designed 3 shadowed toolkits in AutoCAD for more accessible tooling.
- Developed sustainable process for labelling CFM56 engine part kits by creating spreadsheet that generates labels from inputted data; doubled kitting capacity.
- Updated planning figures to clarify vague diagrams and eliminate quality problems.

ACADEMIC PROJECTS

Wind Power
Fall 2016

- Designed, prototyped and tested small-scale wind turbine blade in team of 4.

Mechatronics
Fall 2015

- Programmed Arduino UNO microcontroller in C++ to control battle robot in team of 3.
- Designed and fabricated robot for maximum stability, heavy weight, traction and robustness within budget and competition guidelines.

LEADERSHIP / TEAMWORK

Mechanical Synthesis
Teaching Assistant
Spring 2016 & 2017

- Planned and facilitated lab section, bringing excitement and structure to class.
- Trained students to mill safely and accurately.
- Designed and built water pump with best flow rate efficiency in team of 5 as student.
- Prototyped 2 iterations of cup holder for lecture hall desks in team of 3 as student.

ASME *Cornell Chapter*
President
Previous roles: Social Chair, Publicity Chair & Webmaster
Spring 2014 – Fall 2017

- Created Recruitment Chair position, actively increasing and retaining membership.
- Planned First Annual Senior Mechanical Engineering Formal with MAE department; 85 students and professors attended.
- Organized 10 social events with co-chair including joint event with 3 other societies, creating tight-knit class of mechanical engineers.
- Advertised 15 club events as well as other MAE events to MAE student body.