GEORGE CHEN

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229 Vassar Street, Cambridge, MA 02139

EDUCATION

Massachusetts Institute of Technology **Cambridge, MA**
Candidate for Bachelor of Science in Mechanical Engineering | GPA: 4.8/5.0 ***June 2021***
Relevant Coursework: Dynamics and Control, Signals and Systems, Thermal-Fluids Engineering, Measurement and Instrumentation, Design and Manufacturing, Mechanics and Materials, Fundamentals of Programming, Numerical Computation, Electronics for Mechanical Systems

EXPERIENCE

Daimler Trucks North America, LLC **Portland, OR**
Product Validation Engineer Intern ***Jun 2019 – Aug 2019***

- Designed and iteratively prototyped a distributed IMU sensor system to measure articulation angle of instrumentation tractor-trailer trucks using Arduino
- Tested and evaluated the performance of the sensor system in MATLAB, calibrated the sensors by data fusion with a GPS module using Kalman Filter, designed the interface PCB layout to read and write CAN messages
- Validated camera systems by overlaying lane lines on recorded videos using computer vision in Python (OpenCV)
- Assisted in engine noise testing and durability testing efforts, assembled brake pressure transducers and CAN bus harnesses for steering / handling tests

Millennium Space Systems, A Boeing Company **El Segundo, CA**
Spacecraft Thermal Engineer Extern ***Winter 2019***

- Designed and executed a characterization test in thermal vacuum chamber comparing the effectiveness of multilayer insulation with other reflective materials, analyzed test data using MATLAB and Microsoft Excel
- Composed test plans, test procedures, and memorandum for record for release to Document Control and Management, created drawings of test configurations using Solidworks
- Worked with system engineers and program managers to assist in requirement verification efforts across multiple subsystems for a flight program in its final phase, ensured action items were in compliance before shipping

MIT Space Systems Laboratory & Lincoln Laboratory: WaferSat **Cambridge, MA**
Research Assistant – Thermal Engineering Team ***Jan 2018 – Aug 2018***

- Characterized thermal behaviors of a PCBSat prototype in space-like environment simulated in thermal vacuum chamber
- Analyze temperature signals using MATLAB and correlate with analytical model in Thermal Desktop
- Developed and revised PID control algorithm using Python and C++ to maintain steady-state temperature inside thermal vacuum chamber with 40% less power output

MIT 2.00B Toy Product Design **Cambridge, MA**
Team Member ***Feb 2018 – Jun 2018***

- Prototyped a piano toy that paints onto a rolling sheet of paper, worked in a team of four over a semester
- Designed, laser-cut, and 3D printed internal support structures for the piano using Solidworks and Illustrator
- Programmed speakers to respond to key presses using Arduino and wired connections for all electronics

SKILLS

Hardware: bandsaw, drill press, CNC mill & lathe, hand & power tools, 3D printing, laser cutting, soldering, PCB design
Software: Solidworks, Thermal Desktop, ROS, Linux, Git, AutoCAD, Arduino, Raspberry Pi, Microsoft Office
Programming: Python, C++, MATLAB, HTML, CSS
Languages: Fluent in English, Mandarin Chinese, and Cantonese