

Jerry Chang

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EDUCATION

Stevens Institute of Technology

Bachelor of Engineering in Mechanical Engineering | **GPA : 3.862**

Hoboken, NJ

Sep. 2017 – May 2021

Course Work : Intro to Robotics, Control Systems, Real Time and Embedded Systems,
Design of Machine Components, Engineering Design, Thermal Engineering, Fluid Dynamics

EXPERIENCE

ConEdison

May 2019 – December 2019

Engineering Aide Intern

NYC, NY

- Performed analysis in Excel of patterns in various case categories such as electrical voltage/phase, feeder and network location, and case status
- Wrote several scripts in SQL and macros in Excel to streamline reports and automate internal processes to save over 30 minutes per day
- Created a short-term automated spreadsheet and long-term solution of Tableau webpage for managing customer inquiries

L3Harris

September 2018 – January 2019

QA Associate

Clifton, NJ

- Performed series of tests such as ionic cleanliness testing and tensile strength testing to determine if part quality was within military and company specifications
- Operated an X-ray machine to inspect and search for defects within FPGA circuits then authorized and approved the boards
- Created reports analyzing inspection findings and performed root cause analysis on failure types

Stevens NASA RMC Team

September 2019 – March 2020

Design Team

Hoboken, NJ

- Headed the dispensing team and supervised the digging team to facilitate complex problem-solving of designs for the digging and dispensing of lunar regolith
- Led the CAD teachings, structure, and organization with OnShape in order to establish a consistent and efficient CAD workspace
- Rapidly prototyped mechanisms to determine viability of various designs and inform further analysis

Stuyvesant High School FIRST Robotics Team 694

September 2015 – Present

Lead Machinist, Design Team, Mentor

NYC, NY

- Optimized part designs for manufacturing and machined parts for the robots using mills and lathes
- Prototyped and aided in the design of the overall robot through strategical game-design analysis
- Led design groups for mechanism subassemblies like an integrated hopper/feeder and a cube intake

PROJECTS

Automated Storage and Retrieval System for Lab Bottles

September 2020 – May 2021

Senior Capstone Project, Mechanical Design Team

- Designed an automated and modular shelving unit with a Cartesian manipulator for storage and retrieval of fluid sample bottles in a lab setting
- Created the CAD model for the manipulator unit with parameterized variables for quick adjustability
- Performed design analysis on leadscrews and stepper motors for optimal cost and performance selection

3D Position Tracking Unit

June 2020 – August 2020

OnShape, 3D Printing, Embedded systems, ESP-32, WebSocket

- Designed a compact unit to accurately track a point in 3D space with a 30 cm spherical workspace
- Fully 3D printed and developed with high resolution encoders with sub-millimeter accuracy
- Created a website with WebSocket technology for rapid low latency data transmission and visualization

TECHNICAL SKILLS

CAD: SolidWorks, OnShape, AutoCAD, ANSYS, FEA, SolidWorks Simulation

Programming: C/C++, Python, Java, MATLAB, Arduino, HTML/CSS, JS/React, SQL, LaTeX

Misc: Hardware, Rapid Prototyping, Machining, 3D Printing, Electronics, Linux, ROS, Word, Excel

U.S. Citizen
Available June 2021