

Peter C. Hwang

240-750-4757 | peterhwang.ph@gmail.com | linkedin.com/in/peterhwang0225 | peterhwangph.github.io

EDUCATION

University of Maryland

BS in Computer Science, Mechanical Engineering, Minor in Statistics | GPA: 3.61/4.0

College Park, MD

Anticipated: December 2023

WORKING EXPERIENCE

UMD Computational Research Lab

College Park, MD

Software Engineering Intern

September 2023 – Present

- Automated simulation parameter entries, test analyses, and data exportations using Python, and Bash queries in a Linux environment to streamline manual components while reduce processing times by 56%
- Analyzing parameter sensitivities of exothermic compositions to developing state of equation models for the Department of Defense with pharmaceutical mythologies using Python, R, MySQL, and MongoDB

Textron Systems

Sterling, VA

Software Engineering Intern

May 2022 – August 2022

- Streamlined initialization of NestJS webpage application using configuration files to identify available stream endpoints
- Integrated AngularJS components to webpages using TypeScript and HTML to monitor query requests and live metrics of local machines
- Utilized MongoDB and Docker to store stream query submissions and reduced processing time for query results
- Implemented AWS Lambda and RESTful API using Flask to dynamically update MongoDB table with appropriate query status and results from external metadata streams

Textron Systems

Hunt Valley, MD

Systems Engineering Intern

May 2021 – August 2021

- Refactored and integrated data analysis application with calibration processes using C# to reduce duration of system testing
- Parsed through 500TB of data logs per system calibration and reported analysis results to engineers during customer compliance troubleshooting
- Consulted with customers to conduct requirement analyses and derived system architecture models and acceptance test procedures

UMD Quantitative Control and Optimization Lab

College Park, MD

Research Assistant

January 2021 – May 2021

- Developed responsive and dynamic webpage using HTML, CSS, JavaScript, and Bootstrap to enable easy access to laboratory publication library, communication portals and abstract of current research endeavors
- Analyzed parameter sensitivities of multi-dimensional physics models using Python scripts to identified optimal underlying model parameters

LEADERSHIP EXPERIENCE

Society of Asian Scientists and Engineers

College Park, MD

Student Representative

August 2022 – Present

- Coordinated body-wide events to expose nearly 150 members to over 30 unique internship, employment, and networking opportunities
- Spearheaded multi-functional outreach efforts to expand organization membership amongst fellow colleagues by 35%

PROJECTS

Memory Mosaic (In Progress)

New York, NY

- Developed a photo archiving application using JavaScript, Cloudinary, and PostgreSQL where users can store, retrieve, update, and delete locally uploaded photos and videos

Capital Wise

New York, NY

- Created a webpage using HTML/CSS and JavaScript with Angular components to calculate and visualize projected capital gains from investments using non-linear regression models while managing inputted and calculated data in a local SQL database

Currency Flow

College Park, MD

- Created a webpage application using HTML/CSS and JavaScript in an Express framework where users can conveniently conduct international currency conversions using Fixer API while monitoring user demographics through dynamically updating MongoDB tables

SKILLS & CERTIFICATIONS

PROGRAMMING SKILLS

Java, Python, C++, SQL, Kotlin, XML, JavaScript, HTML, CSS

TECHNOLOGIES

Postman, Docker, Git, MySQL, PostgreSQL, Cloudinary, MongoDB, Bootstrap, Express, React

CERTIFICATIONS

AWS Certified Cloud Practitioner (*In Progress*)