

EDUCATION

DUKE UNIVERSITY

BS IN ELECTRICAL & COMPUTER
ENGINEERING

BS IN COMPUTER SCIENCE

Aug 2015 - May 2019 | Durham, NC

Concentration in Digital Systems
Pratt School of Engineering

SKILLS

PROGRAMMING

- Java
- JavaScript
- C++, CUDA
- Matlab
- SQL
- Typescript
- C#
- Swift

FRAMEWORKS

- Angular
- React
- Knockout.js
- Vue.js

RELATED LANGUAGES

- Arduino
- HTML & CSS

3D MODELING

- Fusion 360
- 3DS Max
- SolidWorks
- AutoCAD
- Blender
- MudBox

ADDITIONAL SKILLS

- Adobe Illustrator
- Hand Milling and CAM
- Soldering

EXTRACURRICULARS

LEADERSHIP

Design for America

Secretary, Co-Team Lead

Duke University Marching Band

Treasurer, Piccolo

Duke Electric Vehicles

Co-Lead for Driver Strategy and
Prototype Driver

VOLUNTEERING

Females Excelling More in Math, Engineering, and Science

Volunteered with elementary
through high school-aged girls

Girls Engineering Change

Taught young women soldering
skills and inspired them to pursue
engineering degrees

EXPERIENCE

SS&C ADVENT | ASSOCIATE SOFTWARE ENGINEER, BACKEND

Aug 2020 - Present | San Francisco, CA

- Added new parameters and settings to the core Portfolio Rebalancing product. Enabled migration to auto-populate databases at service launch time, created custom loading of attributes and files for clients, and added sorting, filtering, and searching capabilities for new attributes.
- Troubleshooted and resolved slow query issues by introducing SQL indexing and removing dangling associations between entities that had been removed from the database, shaving minutes off of the time taken to refresh data from ground to cloud.
- Created a Jenkins job to automatically create databases and copy contents between environments in Kubernetes and Swarm to greatly improve development velocity.

PRECISIONLENDER | SOFTWARE ENGINEERING INTERN, PRODUCT DEV

June 2018 - Aug 2018 | Cary, NC

- Designed and implemented a full stack web app to deliver real time NLP-driven insights based on user queries to PrecisionLender's AI client.
- Created wireframes of the UI which was then developed using TypeScript, Knockout.js, HTML, and CSS to be a responsive, dynamic, and accessible experience. Used AJAX calls to retrieve JSON files that were parsed and reformatted in the C# backend.

CARBON | SOFTWARE ENGINEERING INTERN, LIFE SCIENCES

June 2017 - Aug 2017 | Redwood City, CA

- Implemented a supply chain dashboard that reduced client wait time for sample parts by 33%. Written primarily in Java and VBA.
- Developed a full stack Excel dashboard to enable engineers to rapidly process and visualize 3D printing statistics from any individual Carbon printer.
- Generated and produced low-cost, high-resolution parts from client-submitted 3D files. Optimized client designs to decrease cost and production time. Validated part accuracy and material consistency.

DUKE INNOVATION CO-LAB | DESIGNHUB SERVICES FOUNDING MEMBER AND TECHNICAL CONSULTANT

Feb 2016 - May 2019 | Durham, NC

- Designed and constructed creative engineering solutions. Led a wide range of clients through the design process from concept to product. These clients consisted of students, Duke Hospital staff, and University Researchers. Notable past projects include third world organ transport devices and machinery parts.
- Organized and taught courses on CAD, 3D printing, and CNC machining.
- Oversaw the world's largest higher education 3D printing bank.

COURSEWORK

GRADUATE LEVEL

- Human-Computer Interaction
- Modern Cryptography
- Mobile App Development (iOS)
- Digital Signal Analysis

UNDERGRADUATE LEVEL

- Software Design (MEAN Stack)
- Design & Analysis of Algorithms
- Operating Systems
- Database Systems (PostgreSQL)

AWARDS & RECOGNITION

Duke Technology Scholars

2017-2018

Shell Eco-Marathon, 1st Place

2017

Duke Electric Vehicles Team: Prototype Electric

Duke ChangeWorks Startup Challenge, 1st Place

2016

CodeStory: An interactive narrative to teach children to code, modeling lead and front end developer