

## EDUCATION

**Carnegie Mellon University Silicon Valley** Aug 2023 — Dec 2024

*Master of Science in Software Engineering*

*Courses: Software Engineering, Software Verification & Testing*

**New York University** Aug 2019 — Jan 2023

*Bachelor of Science in Computer Science, Data Science (AI concentration)*

Cumulative GPA **3.91/4.0**, Major GPA **3.98/4.0**. Completed the 4-year program in **3.5 years**.

*Courses: Data Structures, Algorithms, Operating Systems, Software Engineering, Machine Learning, Deep Learning, Reinforcement Learning*

## SKILLS

**Programming Languages** Python, JavaScript, TypeScript, SQL, HTML, CSS, Java, Golang, C, Bash, PHP  
**Project Engineering** React, Next.js, d3, Scss, Django, Git, AWS, Docker, Rollup, Webpack, Vue, Jenkins  
**ML and Big Data** PyTorch, Sklearn, Pandas, Spark

## WORK EXPERIENCE

**Software Engineer Intern** May 2022 — Jul 2023

*Orka Labs*

*Palo Alto, CA*

- Led development of responsive **React** UI component library (**Rollup**), wrote corresponding API docs and use cases with CI/CD (**AWS EC2, GitHub Workflow**), development efficiency increased by around **30%**, code redundancy decreased by **26%**
- Constructed and maintained **10+** pages including products intro, checkout, sign in, and customer support (**React, Next.js**)
- Established client-side monitoring system (**Django, React Lifecycle**), exception detection rate increased about **300%**
- Investigated on upgrade for **Next.js 13** and **React 18**, optimizing dev and UX, end-to-end deployment rate increased by **11%**
- Set up AB test toolchain (**AWS, Next.js** middleware, **JavaScript**), establishing project-wide feature release and metrics collection
- Designed auto git log tracker to connect OA system feature/issue management (**Golang**), increase overall team efficiency over **6%**

**Machine Learning Intern**

Jun 2021 — Aug 2021

*Microsoft*

*Shanghai, China*

- Established **Python** project for data preprocessing and feature engineering on **Azure** with **pandas** and **numpy**
- Predicted energy consumption results with multiple ML models including **LR, SVR, GBFT, RF**, for car workshops of Shanghai Volkswagen Automotive Co., Ltd. Best performance of model reached **78%**
- Assisted operation group to deploy trained model on **Power BI**, as one part of data visualization tool
- Conducted meetings with client, reported to client with work progress, and introduced principle of models

## RESEARCH AND PROJECTS

**Software Engineer, Research Assistant Intern**

Jul 2023 — Nov 2023

*New York University Shanghai*

*Shanghai, China (Remote)*

- Constructed **10+** pages with **React** including login, task list, writing assignments, FAQ, message, and consulting training
- Created backend with **Django** and **SQLite**, established **crontab** jobs for scheduled SMS tasks with **Alibaba Cloud**, synced data with **Qualtrics** Web API, personalize admin site with **Django admin** to manage admin users and groups access
- Utilized **AWS CloudWatch** for event tracking, deployed with **Nginx** on **AWS EC2** instance, setup CI/CD with **GitHub workflow**
- Collaborated with NYU Shanghai Diversity Lab to design and built an LGBTQ+ mental health consulting training web application

**Software Testing Oracle Generation and Machine Learning Approach Evaluation**

Jan 2022 — May 2022

*Deans' Undergraduate Research Fund (DURF), New York University Shanghai*

- Proposed detailed **ML model evaluation pipeline**, supporting reproducing research paper in automatic test oracle generation
- Optimized **2 active learning** strategies, decreased **80%** of test cases needed for model training with equal accuracy
- Utilized proposed pipeline with **Randoop** and **JaCoCo**, evaluated and analyzed several static learning, active learning, and deep learning methods as well as feature extraction techniques with **Defects4J** database

**Flytrip — Flight and Ticket Management System**

Apr 2021 — May 2021

- Designed and built **React** web app for airline query, booking, and management for customers, agents, staff, and system admin
- Set up frontend with **Webpack**, antd and HighCharts, setup communication with **Socket.io**, ensuring dynamic update of data
- Set up **Flask** backend with **MySQL**, defined and implemented secure **Restful APIs** with **Swagger** documentation

## HONORS AND LEADERSHIP

New York University Magna cum Laude, Shanghai Excellence Award

May 2023

New York University Dean's List for Academic Year

2019—2020, 2020—2021, 2021—2022

New York University Shanghai Recognition Award

2020—2021, 2021—2022

President, Splice Computer Science Club, New York University Shanghai

2020—2021

Learning Assistant (React), CSCI-SHU 235 Information Visualization

Aug 2021—Dec 2021