

XIAOCHEN (NIGEL) LU

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EDUCATION

New York University

M.S. in *Computer Science* (Cumulative GPA: 3.95/4.0)

New York, NY

Sept. 2023 – May 2025

Relevant Coursework: Intro to Java (Spring Boot), Software Engineering (Django + scrum development), Algorithms, Computer Networking, Network Security, Intro to Offensive Security, Information Security, Programming Languages, Big Data

New York University

B.S. in *Data Science*, double major *Finance*, minor in *Computer Science* (Cumulative GPA: 3.91/4.0)

New York, NY and Shanghai, China

Sept. 2019 - May 2023

Latin Honor: Magna Cum Laude; NYU Honors Scholar; Dean's List 2019-2023

Relevant Coursework: Applied Internet Technologies, Computer Architecture (C), Data Structures (OOP), Databases, Machine Learning (TensorFlow), Natural Language Processing (PyTorch)

SKILLS

Programming Languages: Python, JavaScript, TypeScript, Java, SQL, C, C++, R, CSS, HTML

Frameworks & Tools: React.js, Next.js, Vue.js, Redux, Tailwind CSS, Django, Spring Boot, D3.js, Chart.js, Git, Docker, Kubernetes, PostgreSQL, PyTorch, PySpark, Hadoop, Figma Prototyping, Circle/Travis CI (CI/CD), AWS EC2/EB/RDS

Other: Scrum Development, Linux, Slack, Office/Google Suite, Teamwork

PROFESSIONAL EXPERIENCE

Department of Design and Construction, NYC Government Software Engineer Intern (New York, NY) **Jun. 2024 – Aug. 2024**

- Created, trained, and tuned machine learning models using Azure ML Studio, **PySpark**, and Hadoop, applying random forest regressor and time series forecasting to predict construction timelines and enhance construction planning efficiency
- Built a React app with Django to deliver analysis results and incorporated **OpenAI API** to provide AI-powered interactive data insights for over 400 construction engineers within the Department of Design and Construction

eBay Inc., Software Engineering Intern – Cloud Infrastructure Team (Shanghai, China)

Sept. 2022 – Aug. 2023

- Identified the inefficiencies in cluster status monitoring and developed an Average-Time-to-Business Dashboard using **Redux**, **React.js**, and **Django**, which enhanced cluster alerting mechanism and visualized factors that impact service availability, cutting crisis response time by 25%
- Upgraded eBay's KeyHub from **Vue2** to **React** and integrated it into eBay's Cloud Console using TypeScript, Redux, and JS-Plugin, updating it to the latest **OpenPGP** standard to ensure secure password exchange for over 100 infra engineers
- Developed an intuitive interface that automates over 85% of config entries for L7 rule configuration on eBay's **Kubernetes** clusters—load balancing rules at the application layer—increasing efficiency by over 70% and minimizing human errors

Kaizntree Co., Full-stack Software Engineer (New York, NY and Remote)

Sept. 2021 – Feb. 2024

- Built a one-stop management solution for small businesses using **Vue**, **Django REST framework**, and **PostgreSQL**, reducing customers' time spent on administrative tasks from 15 hours average to just 2 hours per week
- Adopted **Scrum Development**, **Travis CI/CD** with **AWS** (later migrated to **Heroku**) to minimize friction throughout the software development lifecycle (SDLC), enabling Kaizntree to address BUGs 40% faster
- Implemented the **2-way integration** between Kaizntree and 4 major sales channels using **OAuth2** (Shopify, Square, Etsy, and Xero), enabling automatic cross-platform stock & order synchronization, thus eliminating manual updates and inconsistency in stocks
- Led Kaizntree's scrum team of three and fostered a collaborative environment, where robust new features were rolled out bi-weekly

Expsoft LLC., Software Engineering Intern (Wuxi, China)

May 2021 – Sept. 2021

- Developed a highly customizable web auditing platform for governments using Spring Boot, **Activiti Workflow Engine**, MySQL
- Secured a \$1,140,000 contract from the Soochow government to build a tailored audit platform fitting their needs

RESEARCH & PROJECTS

Parkrowd NYC, a Parking Spot Info-Sharing Platform based on NYC Open Data (prod app [link](#), repo [link](#)) **Sept. 2023 – Dec. 2023**

- Conceptualized a parking info-sharing platform to tackle urban parking issues using Figma, outlining MVP and MLP feature sets
- Led a Scrum team of 5 to implement Parkrowd as a Django RESTful app integrated with Google Maps API
- Created an automated CI/CD pipeline utilizing TravisCI, AWS Elasticbeanstalk, and Coveralls.io to improve deployment efficiency

Rate My Professor, a redesigned Single-page App for Students to Upload/View Professor Ratings (repo [link](#)) **Sept. 2023 – Dec. 2023**

- Coordinated efficient full-stack development using scrum sprints and backlogs, allowing my team to roll out the app in 2 months
- Utilized Maven, Spring Boot with **JPA**, **Spring Security**, and **multi-threading** to build a robust, highly concurrency-capable backend

Few-shot Segmentation with Adaptive Data Augmentation and Cross Attention ([link](#) to paper on arXiv) **Mar. 2022 - May 2023**

- Proposed an instance-aware data augmentation strategy to improve support image diversity and reduce distribution inconsistency
- Incorporated a 4-D consensus cross-attention module to align query and support features, increasing accuracy by 5.4%