XIAOCHEN (NIGEL) LU

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EDUCATION

New York University   New York, NY
Master of Science in Computer Science **(**Cumulative GPA: 3.95/4.0)   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, NYU Shanghai   New York, NY and Shanghai, China
*Bachelor of Science, Data Science, minor in Computer Science (*Cumulative GPA: 3.91/ 4.0)   Sept. 2019 - May 2023
Latin Honor: Magna Cum Laude;   NYU Honors Scholar;   Dean's List 2019-2023
Relevant Coursework: Applied Internet Technologies, Computer Architecture (Objective C), Data Structures (OOP), Databases, Machine Learning (TensorFlow), Natural Language Processing (PyTorch)

SKILLS

Coding Languages: Python, JavaScript, TypeScript, Java, SQL

Frameworks & Tools: React.js, Vue.js, Django, Spring Boot, Git, Docker, Kubernetes, PostgreSQL, PyTorch, PySpark, Hadoop

Other: Circle/Travis CI (CI/CD), AWS EC2/EB/RDS, Agile Dev, Linux, Figma Prototyping, Slack, Office/Google Suite

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
- Working to build an 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%