

# XIAOCHEN (NIGEL) LU

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## EDUCATION

### New York University, Tandon School of Engineering

*Master of Science in Computer Science* (Cumulative GPA: 3.88/4.0)

Relevant Coursework: Big Data, Algorithms, Advanced Database, Deep Learning

New York, NY

May 2025

### New York University, NYU Shanghai

*Bachelor of Science, Data Science, minor in Computer Science* (Cumulative GPA: 3.91/ 4.0)

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), Data Analytics, Decision Model and Analysis

New York, NY and Shanghai, China

May 2023

## SKILLS

**Coding Languages:** SQL, R, Python, JavaScript, TypeScript, Java, Objective C

**Software Tools:** PostgreSQL, MySQL Pandas, NumPy, SciPy, R Studio, Matplotlib, PyTorch, TensorFlow, Seaborn, Scikit-learn, React.js, Vue.js, Django, Express.js, Spring Boot, Maven, JPA, Thymeleaf, Git, Docker, Kubernetes, Chart.js, OpenCV

**Other Tools:** Circle/Travis CI (CI/CD), AWS EC2/EB/RDS, Agile Dev, Linux/UNIX, Tableau, Office/Google Suite

## PROFESSIONAL EXPERIENCE

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

Sept. 2022 – Aug. 2023

- Innovated an Average-Time-to-Business (ATB) dashboard using **Redux**, **React.js**, and **Spring Boot** to monitor cluster statuses and send checkout alerts, reducing crisis response time by 25% and boosting service availability from 99.14% to 99.8%
- Implemented a predictive analytics model using **Scikit-learn** and integrated it to ATB Dashboard to forecast system load and potential downtime, further reducing system downtime by 40%
- Developed a **SQL-based tool** for automating anomaly detection by *analyzing patterns and metrics* in eBay's cloud infrastructure performance data, benefiting 100+ infrastructure engineers by providing predictive insights into system reliability

**Kaizntree Co.**, Co-founder and CTO, (New York, NY and Remote)

Sept. 2021 – Feb. 2024

- Built a one-stop management solution for small businesses using **Vue.js**, **Django REST framework**, and **PostgreSQL**, earning 100+ happy customers by reducing their time spent on management tasks from 15 to just 2 hours per week
- Designed and executed a data-driven market analysis strategy using **Pandas** and **Seaborn**, identifying key growth opportunities for customers, resulting in an estimated 35% increase in customer acquisition during the roll-out window of this feature
- Collected and analyzed 1000+ user feedback using **Pandas** and adopted **Scrum Development**, **Circle CI/CD** with **Heroku** to minimize friction throughout the software development lifecycle (SDLC), enabling Kaizntree to address BUGs under 24 hours
- Spearheaded the **2-way integration** between Kaizntree and 4 major sales channels using **OAuth2** (Shopify, Square, Etsy, and Xerox) and automated stock & order sync across platforms, putting an end to manual updates and stock inconsistency on different channels
- Won the 2023 NYU Summer Launchpad and 2023 NYUxYale Startup Competition, with a reward of \$15,000 non-dilutive funding
- Earned investment from 3 individual investors and received a total of \$250,000 investment with Kaizntree valued at 5 million

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

May 2021 – Sept. 2021

- Leveraged the power of **Spring Boot**, **Thymeleaf**, **JPA**, and **Maven** to build robust, user-friendly, and highly customizable online auditing platforms for governments
- Secured a project from the Soochow government worth \$400,000 to supply a customized audit platform

## RESEARCH & PROJECTS

**Parkrowd NYC**, a Crowd-sourced Parking Info Sharing Platform based on NYC Open Data (repo [link](#))

Sept. 2023 – Dec. 2023

- Conceptualized a parking info-sharing platform by listing **MVP**, **MLP**, and API documentation, and using *Figma prototyping*
- Implemented Parkrowd as a **Django RESTful app** integrated with **Google Maps API** through **ZenHub Scrum** with a team of 5
- Employed **Travis CI**, **AWS Elasticbeanstalk**, **AWS RDS**, and **Coveralls.io** to build a seamless CI/CD pipeline

**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 of 2 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%