**XIAOCHEN (NIGEL) LU**

New York, NY| Tel: +1 (845) 248-2938 **|** Email: [xiaoclu@outlook.com](mailto:xiaoclu@outlook.com) | Website: http://nigellu.com

Education

**New York University New York, NY**

**Master of Science in Computer Science May 2025**

* Cumulative GPA: 3.88/4.0; Coursework: *Intro to Java* (Spring Boot), *Software Engineering* (scrum development), *Algorithms, Computer Networking, Network Security, Penetration Testing and Analysis*

**New York University New York, NY and Shanghai, China**

**Bachelor of Science,** Data Science, minor in Computer Science **May 2023**

* Cumulative GPA: 3.91/ 4.0; Magna Cum Laude; NYU Honors Scholar; Dean’s List for all Years
* Coursework: *Applied Internet Technologies*, *Computer Architecture*, *Data Structures*, *Databases*, *Machine Learning*, *NLP*

Skills

* Technical Skills: **Python** (PyTorch, Django, OpenCV, Matplotlib), **JavaScript** (TypeScript, React, Vue, ExpressJS), **Java** (Srping Boot), **CI/CD** (Travis), **SQL** (MySQL, PostgreSQL), **Git**, **AWS EC2/EB, Agile Dev (scrum)**, **Slack**, **Docker**, **Kubernetes**

Professional Experience

**eBay Inc. Shanghai, China**

Software Engineering Intern, Cloud Infrastructure Team **Sept. 2022 – Aug. 2023**

* **Averge-Time-to-Business (ATB) Dashboard**
* Proposed and implemented a **Redux**+**React**+**Django** Average-Time-to-Business (ATB) dashboard to monitor cluster statuses and send checkout alerts, reducing crisis response time by 25% and boosted service availability from 99.14% to 99.8%
* **KeyHub (Community’s Encrypted Email UI for Password Exchange)**
* Led the refactorization of KeyHub to conform with the latest **OpenPGP** standard and patched 60+ security vulnerabilities
* Integrated KeyHub with eBay’s Cloud Console using **JS-plugin** and **Redux**, boosting productivity of over 100 infra engineers
* **L7 Rule Config Automation UI**
* Orchestrated an intuitive UI with auto-filling for over 85% of the fields to streamline **L7 rule** configuring process for eBay’s **Kubernetes (K8s)** clusters, increasing efficiency by more than 70% and minimized potential human errors in the loop

**Kaizntree Co. New York, NY and Remote**

Co-founder and CTO **Sept. 2021 – Present**

* **Kaizntree Small Business Management Platform**
* Built a one-stop management solution for small businesses using **Vue.js**, **Django Rest Framework**, **PostgreSQL**, and **Heroku CI/CD**, empowering 100+ happy customers by reducing time spent on management tasks from 15 to just 2 hours per week
* 2-way integrated with 4 major sales channels using **OAuth2**, including Shopify, Square, Etsy, and Xerox, and automated stock sync across platforms, putting an end to the cumbersome manual updates and stock inconsistency on different channels
* Led Kaizntree’s development team and adopted **Scrum, Travis CI/CD** with Heroku to minimize friction, allowing Kaizntree to address customer feedbacks under 48 hours and continuously rolling out new features weekly
* **Champion of NYU Summer Launchpad & NYUxYale Startup Competition**
* Won the 2023 NYU Summer Launchpad and 2023 NYUxYale Startup Competition, with a reward of $10,000 non-dilutive funding
* Got invited to apply for Y Combinator and Techstars NYC startup accelerators, receiving mentorship from entrepreneur coaches
* Earned investment from 3 individual investors and received a total of $50,000 investment with Kaizntree valued at 4 million

**Expsoft Ltd. Wuxi, China**

Software Engineering Intern **May 2021 – Sept. 2021**

* Leveraged the power of **Springboot** and **Maven** to build resilient and user-friendly auditing platforms for governments
* Secured a project from Soochow government worth $250,000 to supply customized audit platform

Research & Projects

**Few-shot Segmentation with Adaptive Data Augmentation and Cross Attention Shanghai, China**

Co-authored a paper, access link [here](https://arxiv.org/abs/2401.09866) **Mar. 2022 - May 2023**

* Proposed an instance-aware data augmentation strategy to improve support image diversity and reduce distribution inconsistency between query and support images in low-data regimes, boosting model performance by 3.7% in ablation studies
* Incorporated a 4-D consensus cross attention module to align query and support features, increasing accuracy by 5.4%
* Wrote 1000+ lines of code to build a scalable PyTorch codebase for few-shot segmentation research, enabling easy backbone swaps

**Multimodal Online Student Engagement Dataset Abu Dhabi, UAE & Remote**

Co-authored a paper and published on **Nuclear Physics B** journal **May 2021 – Mar. 2022**

* Created a 17GB labeled engagement detection dataset of 300+ participants in online learning settings
* Established a CNN-RNN hybrid baseline model to process spatial and temporal signals simultaneously

**Evaluating Parameter-efficient Tuning Methods in Low-data Regimes New York, NY**

Research advised by Professor Sam Bowman on param-efficient tuning in NLP **Sept. 2021 – Dec. 2021**

* Reproduced four SOTA parameter-efficient tuning methods based on HuggingFace libraries and concluded with a research paper
* Evaluated the performance of these methods on various NLP tasks (e.g., sentiment analysis, Q&A) with various train/test partitions