XIAOCHEN (NIGEL) LU

New York, NY | +1 845-248-2938 | xl3139@nyu.edu | Website: <http://nigellu.com>

**EDUCATION**

**New York University** Sept. 2023 – May 2025   
*M.S. in Computer Science*, recipient of a prestigious, merit-based scholarship of $6,000/year.

**New York University** Sept. 2019 – May 2023  
*B.S. in* ***Data Science****, double major in* ***Finance****, with a minor in* ***Computer Science***.

* GPA: *3.91/4.0* cumulative; *3.96/4.0* Data Science major
* Honors & awards: *Magna cum Laude*, *NYU Honors Scholar*
* Computer vision researcher focusing on semantic segmentation in few-shot learning scenarios

Relevant courses: *Applied Internet Technologies* (full-stack dev), *Data Structures*, *Databases*, *Computer Architecture*, *Algorithms*, *Software Engineering* (agile dev), *Intro to Java, Econometrics, Machine Learning*

**SKILLS**

* Lingual: working proficiency in English, familiar with common technical terms in programming.
* Programming: Proficient in **JavaScript**, **Python**, **Java**, and **SQL**, familiar with **Bash**.
* Development: Familiar with **PyTorch**, **ReactJS**, **Django**, **Spring Boot**, **Agile** (scrum), **CI/CD** (Travis CI), **Git VCS**, **VS Code**, **IntelliJ**, knowledge on **Docker**, **Kubernetes (k8s)**, **UNIX**, and **AWS**.

**PROFESSIONAL EXPERIENCE**

**Kaizntree Co.**, *Co-founder*, *Full-stack Engineer* Sept. 2021 – Present

*Co-founded a powerful one-stop management platform for small businesses*

* **Kaizntree Small Business Management Platform**
  + Built a comprehensive management platform powered by VueJS, Django, and PostgreSQL for 50+ small businesses, seamlessly integrating with major sales channels like Shopify, Square, Etsy, Xerox, etc.
  + Combined Django’s backend wizardry with agile development (scrum) and CI/CD, allowing Kaizntree to resolve customer feedbacks under 48 hours and build a wholesale workflow from scratch within two weeks.
* **NYU Summer Launchpad**
  + Stood out in the 2023 NYU Summer Launchpad program and won the 2023 NYU x Yale Startup Competition, a testament to Kaizntree team’s dedication and strong technical foundation
  + Secured a $10,000 non-dilutive funding and $15,000 in AWS credits

**eBay Inc.**, *Software Engineering Intern* at Infrastructure Engineering Team Sept. 2022 – Aug. 2023

*Drove innovative project initiatives, modernized UIs, automated tasks for infrastructure engineering*

* **Average-Time-to-Business (ATB) Dashboard**
  + Conceptualized and proposed a web-based ATB dashboard for live monitoring of clusters and ongoing change requests (CRs), enabling efficient tracking of past issues and reducing issue/crisis response time on cloud servers
  + Spearheaded the development of the ATB dashboard as a Redux-powered ReactJS + Django application
  + Benefited over 100 infrastructure engineers with improved incident response time, streamlined rollout processes, and better operational efficiency
* **KeyHub (Community’s Email UI for Encrypted Password Exchange)**
  + Led the migration of eBay’s KeyHub UI from Vue to React to align with eBay’s tech stack
  + Upgraded KeyHub’s encryption library to conform with the latest OpenPGP standard, fortifying security for password exchange across eBay’s infrastructure team
  + Integrated KeyHub into eBay’s cloud console UI using JS-Plugin, promoting smoother user experiences

**Expsoft Ltd.**, *Software Engineering Intern* May 2021 – Sept. 2021

* **Expsoft Auditing Platform**
  + Leveraged the power of Springboot and Maven to build resilient and user-friendly auditing platforms for governments and civil construction companies
  + Recognized for securing a high-value project worth $250,000, showcasing the value of the software

**RESEARCH & PROJECTS**

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

*Research Assistant mentored by* [*Professor Li Guo*](https://shanghai.nyu.edu/academics/faculty/directory/li-guo)*. Paper submitted to* ***CVPR 2023*** 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
* Incorporated a 4-D consensus cross attention module to align query and support features for improved generalization ability on new domains by 15%
* Used PyTorch to build a scalable codebase for few-shot segmentation research, enabling easy backbone swaps and semi-auto experience in running experiments on Linux high-performance computing clusters
* Set up a neat and re-usable visualization codebase (based on Open-CV, Pytorch, and plotting libraries like Matplotlib) with well-documented APIs to help verify and visualize the results of our proposed model