XIAOCHEN (NIGEL) LU

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

EDUCATION

New York University

Sep 2023 – May 2025

M.S. in Computer Science, recipient of a prestigious, merit-based scholarship of \$6,000/year.

New York University

Sep 2019 – May 2023

B.S. in **Data Science**, 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.

<u>Relevant courses</u> (B.S. and M.S.): *Applied Internet Technologies* (full-stack dev), *Data Structures*, *Databases*, *Computer Architecture*, *Algorithms*, *Software Engineering* (agile dev), *Intro to Java*.

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, and Full-stack Engineer

Sep 2021 – Present

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

• Kaizntree Small Business Management Platform

- o Built a comprehensive management platform powered by VueJS, Django, and PostgreSQL for 50+ small businesses, seamlessly integrating with major sales channels like Shopify and Square.
- o Combined Django's backend wizardry with agile development (scrum) and CI/CD, allowing Kaizntree to meet customers' ever-changing demands and be customer centric.

• NYU Summer Launchpad

- o Stood out in the prestigious 2023 NYU Summer Launchpad program, a testament to Kaizntree team's dedication and strong technical foundation.
- o Secured a \$10,000 non-dilutive funding and \$15,000 in AWS credits.

eBay Inc., Software Engineering Intern at Infrastructure Engineering Team Sep 2022 – Aug 2023 Drove innovative project initiatives, modernized UIs, automated tasks for infrastructure engineering.

• Average-Time-to-Business (ATB) Dashboard

- o Conceptualized and proposed a web-based ATB dashboard for real-time monitoring of clusters and ongoing change requests (CRs), enabling efficient tracking of past issues and reducing issue/crisis response time on cloud servers.
- o Spearheaded the development of the ATB dashboard as a Redux-powered ReactJS + Django application.
- o 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)

- o Led the migration of eBay's KeyHub UI from Vue to React to align with eBay's tech stack.
- o Upgraded KeyHub's encryption library to conform with the latest OpenPGP standard, fortifying security for password exchange across eBay's infrastructure team.
- o Integrated KeyHub into eBay's cloud console UI using JS-Plugin, promoting smoother user experiences.

RESEARCH & PROJECTS

Few-shot Segmentation with Adaptive Data Augmentation and Cross Attention

NYU Shanghai

Research Assistant mentored by <u>Professor Li Guo</u>. Paper submitted to **CVPR 2023** Mar 2022 to May 2023 • Proposed an instance-aware data augmentation strategy to improve support image diversity and reduce distribution

- 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.
- 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.