XIAOCHEN (NIGEL) LU

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EDUCATION

New York University

Sept. 2023 – May 2025

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

New York University

Sept. 2019 - May 2023

B.S. in Data Science, minor in Computer Science, GPA: 3.91/4.0

• Honors & awards: Magna cum Laude, NYU Honors Scholar

Relevant courses: Applied Internet Technologies (React + ExpressJS), Data Structures, Databases, Computer Architecture, Algorithms, Software Engineering (agile dev using Scrum), Machine Learning (PyTorch)

SKILLS

- Programming: Proficient in JavaScript, Python, Java, and SQL, familiar with Bash.
- Development: Familiar with PyTorch, ReactJS, Django, Django Rest Framework, Spring Boot, Agile (scrum), CI/CD (Travis CI + AWS), Git, VS Code, IntelliJ, knowledge on Docker, Kubernetes, and AWS.

RESEARCH & PROJECTS

Few-shot Segmentation with Adaptive Data Augmentation and Cross Attention

New York University

Research Assistant mentored by <u>Professor Li Guo</u>. Paper submitted to **CVPR 2023** Mar. 2022 – 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 on new domains by 15%

Multimodal Online Student Engagement Dataset

SMART-LAB NYU Abu Dhabi

Research Assistant mentored by Professor Hanan Salam

May 2021 to Mar. 2022

Co-authored a paper and published on Nuclear Physics B journal.

- Created an engagement detection dataset in online learning settings with post-class survey results as auxiliary label.
- Established a CNN-RNN hybrid model that processes spatial and temporal signals as the baseline for the dataset.

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

- o 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.
- o Combined Django Rest Framework with agile development (scrum) and CI/CD, allowing Kaizntree to resolve customer feedbacks under 48 hours and build a wholesale workflow from scratch under two weeks

• NYU Summer Launchpad

- o Stood out in the 2023 NYU Summer Launchpad program and won the 2023 NYU x Yale Startup Competition, where Kaizntree was awarded with 1-on-1 mentorship from established entrepreneur coaches
- o Secured a \$10,000 non-dilutive funding and \$15,000 in AWS credits, which have been used to expand Kaizntree's server capacity to provide customers a smoother experience
- o Picked by two investors and received a total of \$30,000 investment

eBay Inc., Software Engineering Intern

Sept. 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 live 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 rollouts

• 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

Expsoft Ltd., Software Engineering Intern

May 2021 – Sept. 2021

• Expsoft Auditing Platform

- o Leveraged the power of Springboot and Maven to build resilient and user-friendly auditing platforms for governments and civil construction companies
- O Secured a project from Soochow government worth \$250,000 to provide customized audit management platform