# XIAOCHEN (NIGEL) LU

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### **EDUCATION**

New York University, Tandon School of Engineering

M.S. in Computer Science, awarded a scholarship of \$6,000

New York University, NYU Shanghai

B.S. in Data Science, minor in Computer Science

One-year study-away at New York University, New York Campus

• Cumulative GPA: 3.9/4.0, Data Science Major GPA: 3.96/4.0

- Honors & awards: Magna cum Laude, NYU Honors Scholar, NYU Shanghai Excellence Award
- Courses: Information Technology, Decision Models & Analysis (Excel-based), Computer Architecture.

#### **SKILLS**

- Lingual: proficient in English and Chinese speaking/writing
- Computer OS: Advanced user level in Ubuntu (Linux), Windows 10/11, macOS X till latest.
- Office & G-Suite: familiar with Office suite and Google suite (e.g., Google sheets, PowerPoint, etc.)

#### **ON-CAMPUS EXPERIENCE**

## Chinese Admissions Ambassador, NYU Shanghai Chinese Admissions Office

Oct 2019 to May 2023

New York, NY

Shanghai, China

Sep 2023 – May 2025

Sep 2019 – May 2023

Sep 2021 - May 2022

- Hosted or co-hosted online/in-person panels for information sharing and advertising admissions events.
- Led weekly campus tours during weekends and present NYU Shanghai to potential students and their parents.
- Assisted in the admission process by performing data cleaning/analysis on applications and provide quantitative insights.
- Provided information to and resolve application issues of potential students via the admissions hotline.

## Resident Assistant, NYU Shanghai Office of Residential Life

Aug 2020 to Jun 2021

- Oversaw a residence hall with 688 residents and developed a safe and inclusive community for 49 students.
- Reached out to and collaborate with different departments/other RAs to hold meaningful on-campus events for residents.
- Shouldered responsibilities like bulletin board, resolving issues resident may encounter, assessing and escalating crisis.

#### **VOLUNTEER EXPERIENCE**

## English Teacher, Steppingstones Shanghai

Oct 2019 to Dec 2019

• Teach English for a class of 52 elementary-level children of migrant workers in Shanghai to promote education equality.

#### PROFESSIONAL EXPERIENCE

eBay Inc., Software Engineering Intern

Shanghai, China

Built, improved, and redesigned some of eBay's cloud platform UIs

Sep 2022 – Jul 2023

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

- o Proposed a web-based dashboard for live monitoring of cluster status and on-going CRs.
- o Led the implementation of the ATB dashboard as a modern single-page application by employing Redux, Antd UI library.
- o Updated the dashboard periodically to cater to different needs, serving a team of over 60 infrastructure engineers.

# • KeyHub (encrypted email UI for password exchanges)

- o Migrated eBay's KeyHub from Vue to React to align with eBay's frontend tech stack.
- o Upgraded KeyHub's encryption library to the latest OpenPGP for enhanced security.
- o Refactored over 95% of the code for reduced API calls, faster rendering speed, and ease of use (tooltips and feedback).
- o Integrated the new KeyHub to eBay's cloud console UI as a plugin using JS-Plugin.

## • Public L7 Rule UI

- o Built an extremely user-friendly UI for configuring and viewing the status of public L7 rules on eBay's cloud platform.
- o Embedded helpful validation feedback for most fields in the L7 rule form via API calls (async)/Regex (real-time).
- o Designed a robust auto filling mechanism to manage the complex dependencies/relationships between fields.

# Kaizntree Ltd., Full-stack Engineer

New York, NY & Remote

Established a startup building a one-stop management platform for small businesses (website here)

Sep 2021 – Sep 2022

### • Kaizntree UI & Backend

- o Adopted VueJS combined with Vuetify component library to offer users a consistent and fluid UI experience.
- o Carefully designed and delivered a one-stop platform covering needs from inventory transaction processing, product building and sales to item tracking via QR codes, helping over 40 small businesses to manage their workflow.
- o Leveraged Django's versatility to build backend services that support rollbacks and agile responses to allow safer version iterations and cater to evolving user demands.

# • NYU Summer Launchpad

- o Got selected to the 2023 NYU summer launchpad under our team's effort and strong technical foundation.
- o Received a \$10,000 non-dilutive funding and \$10,000 AWS credits for running our online platforms.

### **RESEARCH & PROJECTS**

### Few-shot Segmentation with Adaptive Data Augmentation and Cross Attention

NYU Shanghai

- Research Assistant mentored by <u>Professor Li Guo</u>. Co-authored a paper and submitted to CVPR 2023 Mar 2022 to 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.
- 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.