Yichen (Eason) Lu

309E. Springfield Ave Room 609 Champaign, Illinois 61820 | yichen14@illinois.edu | +1 (217) 979-6718

Education

UNIVERSITY OF ILLINOIS AT URBANA CHAMPAIGN

Bachelor of Science Statistics & Computer Science **Expected: May 2023**

Minor: Business

Cumulative GPA: 3.95/4.00

Honor: Dean's List

Relevant Coursework: Computer Vision; Machine Perception; Principle of Safe Autonomy; Applied Machine Learning; Artificial Intelligence; Abstract Linear Algebra; Data Structures; Computer Architecture; Statistical Modeling in R; Database Design; Art of Web Programming

Research Interests: Computer Vision; Machine Perception; Graph Neural Network; Adversarial Learning

Skills

- Programming Skills: Java, C/C++, Rust, Python, R, MySQL, JavaScript, React.js, Node.js, Flask, Django, MongoDB, OCaml, Dart
- Language Skills: Chinese (Mandarin), English

Work Experience

VMware, Inc. **Beijing, China**

Software Engineering Intern Jul. 2021 - Jan. 2022

- Analysis – analyzed Automatic Post-Editing Model's output by using Pandas, NumPy, and matplotlib; debugged the machine learning-based automatic translation system.
- Optimization – built an automatic data processing pipeline for monthly translation system performance reports generation, increasing analysis efficiency by 50%.
- Optimization – accelerated data querying process by applying Elastic Stack to large dataset (2 tigabyte) management.

NetEase, Inc. (NASDAQ：NTES) **Beijing, China**

Software Engineering Intern (Enterprise Development Department) Oct. 2020 - Feb. 2021

- Development – developed the search, sorting, comic download, and comic sharing for "Marvel Unlimited" android version (Chinese official Marvel comic reading app; download page: https://mu.163.com/; daily active user: 5000) independently using Java and the android Jetpack tool library.
- Cooperation – finished comic download function of the app in a team of 3 following the development logic and architecture of android software of large commercial project; self-learned Android development techniques such as DataBinding, DataViewModel and Fragment.

Research/Lab Experience

CYPHY GROUP **Champaign, USA**

Research Assistant | Advisor: Prof. Tarek Abdelzaher Jun. 2022 - Present

- Modelling – built predictable dynamic graph neural network for dynamic graph adversarial defense based on graph adversarial learning; reimplemented Models (EvolveGCN, GAE/VGAE, Euler, VGRNN) and several attack methods (Meta attack).
- Experimenting – designed a standard "config + trainer" deep learning architecture and conducted several experiments.

INTELLIGENT MOTION LAB (Project page: https://cl-system-doc.readthedocs.io/en/latest/**)** **Champaign, USA**

Research Intern | Advisor: Prof. Kris Hauser, Prof. Yuxiong Wang Jan. 2022 – Aug. 2022

- Development – designed and developed a continual few-shot learning system's user interface, interactive segmentation component (RITM), context-aware copy-and-paste technique (CAPS) with a prototype-based incremental few-shot semantic segmentation model (PIFS), improving the robots' continuous learning abilities.
- Construction – implemented a continual learning system benchmark in realistic setting in consideration of system inference latency and user annotation quality.

Leadership Experience

PIGEON BOT (GitHub link: https://github.com/MythSama/pigeonBot**)** **Champaign, USA**

Developer & Project Manager Aug. 2020 - Apr. 2021

- Management – managed project team of 5 members by defining tasks, allocating resources, creating project timeline and organizing cross time zone meetings.
- Development – achieved multiple functions including automatic working reminder and OCR to discern text in pictures in a smart reply chat bot developed based on Marai framework using Kotlin.

GULOFT (Social Media Website) **Beijing, China**

Founder & Backend Developer Dec. 2020 - Dec. 2021

- Leadership – founded a start-up with 15 members, launching a social media platform to help college students build interest groups and study groups.
- Design – designed the product using cosine similarity algorithm for users matching and applied Node.js to the backend construction.