ZHIJIA CHEN

Ph.D. in Computer Science with research topics focusing on Natural Language Processing, Data Mining, and Computer Networking. Possess extensive experience in navigating the entire machine learning life cycle. Expertise in Python, Java, and C++ with a solid understanding of data structures, algorithms, and design patterns.

Philadelphia, PA
(267) 968-5796
zhijia.chen@temple.edu
linkedin.com/in/zhijia-chen93/
github.com/ZhijiaCHEN

PROFESSIONAL EXPERIENCE

Software Engineer Intern — **Google**
May 2023 - present   Cambridge, MA

- Extracted signals from router system logs to detect fast-rerouting failures on Google backbone networks. (C++, Python, SQL)
- Designed metrics to measure the scale of the fast-rerouting failures at the device level and metro level.
- Developed pipelines to generate weekly reports on the hot spots and network service impacts of the failures.

Software Engineer Intern — **Meta**
May 2022 - Aug 2022   Menlo Park, CA

- Built deep learning model for relational closeness prediction on large social graphs, improved AUC score by 4%. (Python, PyTorch, SQL)
- Developed efficient data pipelines to perform features engineering from Hive tables with over 1B records.
- Solved imbalanced data issues with innovative data synthesis techniques, increasing the positive rate of the dataset from 10% to 50%.

Research Assistant — **Temple University**
Aug 2017 - present   Philadelphia, PA

- Conducted research on Data Mining, NLP, Deep Learning, and Computer Networking with 5 publications at top-tier conferences.
- Designed and developed a global scale comment crawling system with front-end web portal and back-end crawler server. Implemented a crawler controller using a database to achieve distributed crawling and guarantee data consistency. (Python, React, Java, Flask, SQL, MySQL)

Software Engineer — **Fujian-HIT Research Institute**
Aug 2016 - Jul 2017   Quanzhou, China

- Experienced in backend software development, RESTful API design, and database management. (C++, Python, JavaScript, SQL, Qt)
- Developed the backend system for an urban sewage monitoring Web portal and deployed the system with AWS EC2 and RDS services.

EDUCATION

Ph.D. in Computer and Information Science
Temple University

Sep 2017 - Dec 2023 (expected)   Philadelphia, PA

Bachelor of Engineering in Information Engineering
Harbin Institute of Technology

Sep 2012 - Jun 2016   Harbin, China

PUBLICATIONS

"Web Record Extraction with Invariants", VLDB 2023.
Chen, Z., Meng, W., Dragut, E.

"COIN – An Inexpensive and Strong Baseline for Predicting Out of Vocabulary Word Embeddings", COLING 2022.
Schneider, A., He, L., **Chen, Z.**, Mukherjee, A., & Dragut, E.

"(Demo) Boléro: Enabling Policy Innovation in Interdomain Routing", SOSR 2019.
Chen, Z., Wang, A.

"Enabling Policy Innovation in Interdomain Routing: A Software-Defined Approach", SOSR 2019.
Wang, A., **Chen, Z.**, Yang, T., & Yu, M.

"Internet Routing and Non-monotonic Reasoning", LPNMR 2019
Wang, A., **Chen, Z.**

TECHNICAL SKILLS

Programming Languages
C++, Java, Python, JavaScript, SQL, MATLAB, Shell Scripting

Tools/Frameworks
Pytorch, AWS, React, Flask, Git, Docker, Qt, Selenium, PostgreSQL, MySQL