KEVIN L. WANG

Ann Arbor, MI · (269) 271-9355 · kvnwng@umich.edu · www.kevinlw.com

EDUCATION

University of Michigan - Ann Arbor **August 2020 – May 2024**

- *B.S.E. in Computer Science. Minors in Mathematics and Statistics.* *Major GPA: 3.8*
- *Courses:* Operating Systems, Machine Learning, Networks, Computer Organization, Probability Theory, Theoretical Statistics, Statistical Computing, Real Analysis, Linear Algebra, Statistical Inference, Differential Geometry, Stochastic Processes.
- *Skills*: (*Proficient*) C++; C; Python; Git; Bash; Unix; JavaScript; HTML; CSS; React; Flask; R (*Familiar*) SQL; Java; AWS, GCP

EMPLOYMENT

Raytheon BBN **Summer 2023**

Software Engineer Intern

- Supported the development of a tool to remotely monitor and report server failures using **C** and **FreeIPMI.**
- Improved algorithm that identifies server failures, resulting in **24% less false positives.**
- Maintained documentation and technical specifications for application code to facilitate future developments.

Optum **Summer 2022**

Software Engineer Intern

- Assisted engineers in aggregating healthcare data of **250 million people** as part of the Digital Identity team.
- Led a team of interns to overhaul product documentation using **MKDocs** and **Github**, generating **$400,000 in savings**.
- Streamlined documentation for the data matching algorithm, **increasing developer productivity by 27%.**
- Presented progress and project impact to major shareholders in biweekly meetings.

University of Michigan **Fall 2021 – Current**

Machine Learning Researcher (PI: Dr. Feng)

- Implemented Volterra Signatures in Convolutional Neural Networks using **Python** and **PyTorch**.
- Designed high-performance algorithms to compute Volterra Signatures, **reducing computational costs by 92%.**
- Building a predictive neural network model by using Volterra Signatures for feature extraction.

SOFTWARE PROJECTS

Thread Library (EECS 482) – ***C++, Threads, Mutexes, Condition Variables***

- Implemented a thread library in **C++** including threads, mutexes, and CVs for uniprocessor systems.

Multi-threaded Network File System (EECS 482) – ***C++, Threading, Smart Pointers, Socket Programming, RAII***

- Developed a multi-threaded network file system in **C++** allowing users to remotely create and write to directories/files.

Static Router (EECS 489) – ***C, Ethernet, ICMP, ARP, TCP/UDP, Networking Protocols***

- Created a static router in **C** to receive Ethernet packets and forward them to the correct outgoing interface.

LRU Cache (EECS 370) – ***C, LRU, Bit Manipulation, Object Code***

- Simulated fully associative and direct-mapped caches in **C** and handled cache misses using the LRU replacement policy.

Pairs Trading – ***Python, NumPy, Pandas, Statsmodels, Matplotlib, Google Cloud Platform***

- Built infrastructure for a pairs trading strategy seeking to profit off long/short positions using **Python**.

Soccer Machine Learning – ***Python, NumPy, Pandas, Matplotlib, Scikit-learn***

- Implemented the Bradley-Terry-Luce statistical model to predict the outcome of the Champions League Final using **Python**.

AWARDS & ACTIVITIES

- **Dean's List & University Honors (All semesters).** Awards given for maintaining a 3.5+ GPA.
- **Regent's Merit Scholarship (UofM).** $1,500 scholarship awarded to the top 2% of in-state students.
- **Quantitative Investment Society (UofM).** Student club member. Developed projects and interests in quantitative finance.
- **Michigan Hackers (UofM).** Machine learning team lead. Organized a computer vision project in a club of >100 members.
- **ACSL Finalist (2020).** Selected out of >5,500 participants to compete in the ACSL HS Programming Finals.
- **First Place, EMU (2019).** Placed 1st out of >40 teams in the EMU HS programming competition.
- **USACO Silver (2018).** Competed in the silver division of the USACO monthly coding competitions.