

Michael T. Wang

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EDUCATION

University of Michigan - Ann Arbor, Michigan

Expected: May 2026

Bachelor of Science in Computer Science and Mathematics

GPA: 3.82/4.00

- Courses: Machine Learning, Data Structures & Algorithms, Web Systems, Operating Systems, Probability Theory, Computer Vision, Linear Algebra, Differential Equations, Real Analysis, Computer Architecture, Combinatorics
- HAIL Full Scholarship, TAM Trading Competition - 1st Place, MIG Trading Competition - 2nd Place, Michigan Finance and Math Society, Michigan Chinese Business Club, Michigan Hackers, IiA Startup Incubator

Okemos High School

May 2022

- Awards: Class Valedictorian, 2020 National HackBFS Blockchain Ideation Challenge 5th Place, OHS Investment Competition 1st Place (73.63% ROI), 2022 National Merit Finalist, AMC Distinguished Honor Roll

EXPERIENCE

Quantitative Developer Intern

May 2024 - July 2024

Investment Alpha LLC

Ann Arbor, MI

- Build and enhance a low latency trading platform in C++, streaming market data via an encrypted pipeline using Apache Kafka and OpenSSL and processing thousands of updates a second through a distributed message handler
- Boost efficiency via scheduled downtime and speed up calculations of valuation and risk analytics like VaR by 60% using parallelization, GPU computing, microservices, conditional computing, and algorithmic differentiation

Computational Theory (EECS 376) Instructional Aide / TA

December 2023 - Present

University of Michigan College of Engineering

Ann Arbor, MI

- Lead and record weekly recitations, hold Office Hours, and create homework problem sets for 1000-student class
- Teach topics including decidability, paradigms of algorithm design, computational complexity, and cryptography

Software Engineering Intern

June 2023 - August 2023

SodexoMagic

Lansing, MI

- Wrote Python scripts to create a centralized dataset from an IBM Maximo database for analysis and reporting
- Integrated with Excel and Maximo APIs to automate the process of consolidating and validating Excel spreadsheets and databases, which reduced time spent by 90% vs. manual checking and eliminated potential for human error

Information Technology Intern

June 2021 - July 2022

Summer Institutes

Lansing, MI

- Streamlined operations at workshops through upkeep of IT infrastructure and creation of an Excel tracking system

PROJECTS

Computer Vision (CV) World Landmark Classifier | *Python, PyTorch, Pandas, NumPy*

- Engineered a CNN with PyTorch, achieving an AUROC score of 0.89 on validation data set of ~4000 photos
- Utilized ML techniques such as transfer learning, data augmentation through grayscale modification algorithms and image rotation, weight decay regularization, and parameter/criterion selection to increase performance

🍷 Yum! Japan (Pro bono) | *HTML, CSS, JavaScript, Bootstrap, Google Maps API*

- Developed a user-friendly business website for a local restaurant using JS and Bootstrap, integrating features such as menu viewing and Google Maps widget, boosting profits and web traffic by 50% via Search Engine Optimization

Search Engine | *Python, HTML/CSS, Flask, Threading, Hadoop, AWS*

- Used Hadoop to generate an inverted index of 3000 scraped web pages on AWS cluster servers and sped up search algorithm computations by 80% via parallelization techniques including multithreading and load balancing
- Implemented query cleansing and a combination of PageRank and tf-idf weighting to maximize relevance of results

Instagram Clone | *Python, React, Flask, HTML, CSS, Threading, SQL, AWS*

- Created and deployed a full-stack Instagram clone on AWS using a REST API with Flask as the back-end
- Scaled user database with PostgreSQL and used React for dynamic client-side interface, supporting infinite scroll

TECHNICAL SKILLS & INTERESTS

Programming Languages: C/C++, Python, Java, JavaScript, SQL/PostgreSQL/SQLite, HTML/CSS

Frameworks/Tools: PyTorch, scikit-learn, Tensorflow, NLTK, React, Pandas, NumPy, Flask, Jinja, AWS, Git, Hadoop

Interests: MacGyvering things, working out, playing poker, cooking, basketball, investing and following the markets