# **Zhe (Dennis) Wang**

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#### **Education**

### University of Pennsylvania, Philadelphia, PA

08/2023 - 05/2025

Master of Computer and Information Technology | GPA: 4.0/4.0

- Coursework: Database Systems, Software Engineering, Programming and Problem Solving
- Volunteer: MCIT student leader, formed the **Diversity & Inclusion** team, launched the **Alumni Panel**, coordinated the **First-Year Mentorship** program, and led the **MCIT Hackathon**

#### Lafayette College, Easton, PA

08/2018 - 01/2022

BA, Mathematics and Economics | Summa Cum Laude | GPA: 3.9/4.0

# **Work Experience**

#### AsiaInfo Technologies, Returned Software Engineer Intern

05/2024 - 08/2024

- Implemented key features such as user registration, identity verification, and session management, providing service for a company with **10,000+** employees, supporting over **50 million** database queries
- Designed a safety enhancing features by applying RSA encryption on 300,000+ logins
- Integrated back-end APIs with the database and the frontend pages using Java, JavaScript, and MySQL.

#### AsiaInfo Technologies, Software Engineer Intern

01/2023 - 08/2023

- Led the front-end migration of a high-traffic WeChat program from **Vue H5** to **Uni-App**, saving memory usage, optimizing rendering, and improving mobile response time by averaging **200ms**
- Implemented a JWT based authentication system, enhancing user session security and reducing server load
- Maintained a testing system, conducting extensive unit and integration tests that resulted in a **15**% reduction in post-deployment issues and ensured reliable system performance

#### NetEase Cloud Music, Machine Learning Engineer Intern

05/2022 - 08/2022

- Launched a recommendation model with 80%+ accuracy, resulting in \$70k+ in annual cost saving
- Designed and implemented a new algorithm using Java, leading to 7.3% increase in user engagement
- Extracted and analyzed 300 TB of historical data through Spark SQL and RStudio identifying trends and proposing new relational models

# **Recent Projects**

#### Wildfire Detector, Project Manager

- Deployed an AI-powered wildfire detection platform to provide accurate predictions on potential wildfires, utilizing **FastAPI/Python** backend and **Bootstrap** frontend, while integrating **Computer Vision** models and a **ChatBot**
- Implemented user interaction features, including uploading and bot chatting, and integrated with the backend APIs
- · Led cross-functional programming, tracked project progress, and coordinated tasks among team members

# MCIT Degree Planner Full Stack Developer

- Developed a curriculum planner application, supporting the MCIT community for 150+ students
- Implemented elective search, course recommendation and mentorship pairing features with 100% Junit test coverage
- Combined various data structures using Java and applied Gale-Shapley algorithm in Python
- Managed a team of 4 utilizing **Kanban** frameworks to distribute works and faciliate seamless project integration

# **Crowdfunding Page** - Full Stack Developer

- · Launched a crowdfunding web platform to support small businesses in fund raising during financial hardship
- Developed resilient **RESTful APIs** with real-time updates using **Express** and **Node**, stored data using **MongoDB**, and integrated with the main applications through custom HTTP request handling
- Implemented registration, authentication, encryption, and profile management features using Java

#### **Skills**

- Programming Languages: Java, JavaScript, TypeScript, Python, C/C++
- Web Development: HTML/CSS, Express.js, React.js, Redux, Node.js, Vue.js, Bootstrap
- Technology: AWS, Docker, Firebase, Flask, Git, SQL/NoSQL, MongoDB, Neo4j, Linux