Minh Vu

Gettysburg, PA | minhvud3008@gmail.com | linkedin.com/in/minhvu | github.com/minhvdq | damianovu.com/

SUMMARY

Aspiring software engineer with a strong foundation in computer science and mathematics, pursuing a Bachelor of Science at Gettysburg College. Experienced in developing and optimizing distributed systems, with a keen interest in contributing to large-scale projects like Kafka. Self-motivated and collaborative, with a proven track record of improving system performance and reliability.

EDUCATION

Gettysburg College | Gettysburg, PA *Bachelor of Science in Computer Science and Mathematics* | Expected: Dec 2026

    Relevant Courses: Data Structures and Algorithms, The Theory of Computation, Database Systems, Operating Systems.
    Achievements: Bronze Medal at PSU-Harrisburg site The ICPC Mid-Atlantic Regional Contest 2024.

EXPERIENCE

Software Engineer Intern | VinAI | Hanoi, Vietnam | Jun 2024 – Aug 2024 - Improved distributed database synchronization, enhancing data sharing speed by **15%** and achieving **99.8% uptime** for real-time operations, aligning with best practices for software development. - Collaborated with AI teams to streamline data access for object recognition models, supporting efficient processing and customer-facing impact. - **Tech Stack:** Node.js, MongoDB, Apache Zookeeper, Couchbase.

Full-stack Developer | Gettysburg College | Hanoi, Vietnam | Jun 2025 – July 2025 - Developed a full-stack event management application, automating processes to reduce workload by **60%**, demonstrating effective project management and deliverable execution. - **Tech Stack:** React.js, Express.js, MySQL.

Undergraduate Researcher Assistant | Gettysburg College | Remote | May 2024 – Jul 2024 - Co-authored a peer-reviewed study and engineered a Java-based simulation with **99%** strategy alignment, showcasing strong analytical and communication skills.

PROJECTS

Book Ordering System | May 2025 – July 2025 - Designed a distributed book ordering system using microservices, implementing the SAGA pattern for transaction management, and reducing read-query latency by **40%**. - Utilized Apache Kafka for event-based communication, aligning with Confluent's focus on distributed systems. - **Tech Stack:** Java, Spring Boot, Apache Kafka, Docker, PostgreSQL, Kubernetes.

Mail Chat | June 2024 – July 2024 - Built a scalable chat application with microservices for efficient message delivery, leveraging event-driven workflows with RabbitMQ and gRPC. - Deployed using Docker Swarm & Kubernetes, ensuring robust service management. - **Tech Stack:** Go, Docker, Kubernetes, RabbitMQ, gRPC.

Books Searcher System | Dec 2024 - Developed a distributed system that reduced search times by **40%** using the TF-IDF algorithm, ensuring fault tolerance with Apache Zookeeper. - Optimized communication with Protocol Buffers, reducing payload by **25%**. - **Tech Stack:** Java, Apache Zookeeper, Protocol Buffer.

TECHNICAL SKILLS

    Languages: Java, Go, C++, JavaScript, Python, SQL.
    Frameworks & Tools: Apache Kafka, Docker, Kubernetes, Node.js, Express.js, React, RabbitMQ, MongoDB, Postgres, Couchbase.