CHRISTOPHER YUN

42722 Freedom Street, Chantilly, Virginia 20152

📞 703-606-8406 ✉ cyunsoftware@gmail.com in linkedin.com/in/christopheryun ⌗ kamicyun.github.io

Education

University of Maryland, College Park   **Aug. 2021 – May 2025**
Bachelor of Science in Computer Science   *College Park, MD*

Experience

Amazon Web Services   **June 2024 – Aug. 2024**
Software Development Engineering Intern   *Sunnyvale, CA*
- Reduced inefficient resource usage by 20% by developing an AWS-based application to automatically identify and reclaim idle resources in a distributed computing service. Leveraged CI/CD pipelines to enable rapid iteration and deployment
- Designed and implemented a customer-facing reporting system using React and AWS enabling users to visualize resource utilization data with advanced filtering options, empowering customers to identify and remediate inefficiencies.
- Architected and deployed serverless solutions using AWS Lambda, DynamoDB, and API Gateway accounting for scalability to handle thousands of concurrent requests.

Brivo Inc.   **May 2022 – Aug. 2022**
Backend Software Engineering Intern   *Bethesda, MD*
- Enhanced GraphQL system performance through an architectural overhaul of an AWS cloud application, leveraging AWS AppSync, Lambda, and DynamoDB, while maintaining backward compatibility with legacy systems to ensure seamless transitions
- Optimized Node.js server performance, reducing average response times by 44% through code refactoring, Redis caching, and efficient use of AWS Elastic Beanstalk, resulting in a smoother user experience and lower infrastructure costs

Vesta Technologies LLC.   **Aug. 2020 – May 2022**
Founder/Fullstack Software Developer   *Chantilly, Virginia*
- Spearheaded a cross-functional team of 5 engineers to design and deliver a SaaS-based desktop application using Python, React.js, and Go, optimizing e-commerce checkout workflows to enable users to secure high-demand items generating over $500,000 in gross revenue
- Reverse-engineered Akamai WAF by analyzing JavaScript-based security mechanisms, developing a custom TLS request client in Python and Go to simulate legitimate user traffic and bypass advanced bot detection systems.
- Designed and trained a neural network using TensorFlow to generate realistic mouse movement telemetry fingerprints, mimicking human behavior with 98% accuracy
- Architected and deployed a scalable, microservices-based backend on AWS, leveraging EC2, S3, RDS, Lambda, and Express to support over 200 concurrent users.

CACI Inc.   **May 2019 – Aug. 2020**
Software Engineering Intern   *Herndon, VA*
- Engineered a desktop application using Ruby, Qt framework, and Ball Aerospace libraries to supervise and control space system hardware, integrating real-time data visualization.
- Developed a Python-based command-line tool to manage and monitor space-bound systems, ensuring seamless operation through robust TCP and UDP communication protocols.

Projects

Financial Tracking Dashboard | *React.js, Flask, Firebase*   **June 2024**
- Developed a comprehensive financial management dashboard for fraternity use, streamlining budgeting, expense tracking, and member payment records.
- Engineered a secure and scalable full-stack architecture using React.js for the front end and Flask for the back end, with deployment on Firebase for real-time database management, authentication, and cloud storage, ensuring high availability and scalability.

Nerf Missile Interception System | *Python, C++, OpenCV, PySerial*   **Mar. 2022**
- Led a team of engineers to design and build a 3D-printed Arduino Nerf turret capable of accurately shooting airborne projectiles, winning first place at the Bitcamp Hackathon.
- Developed computer vision algorithms using OpenCV to detect and track projectiles midair, and implemented quadratic regression models to predict speed, acceleration, and trajectory with 90% accuracy.

Technical Skills

Languages: HTML/CSS, JavaScript, TypeScript, Golang, SQL, Java, Python, Ruby, Rust, OCaml, C++, Kotlin
Developer Tools: VS Code, Figma, Jira, Notion, Confluence, Git, Docker, Github, PyCharm, IntelliJ, Eclipse
Technologies/Frameworks: React, Next.js, Express, Node.js, Redis, MongoDB, MySQL, Postgres, gRPC, OAuth, Webpack, GraphQL, Django, Flask, AWS, Firebase, CI/CD, Jenkins, TensorFlow, Keras, OpenCV, Linux