

Anray Liu

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Profile

Student cloud engineer with 16 months of industry experience in cloud platforms, DevOps, and microservice development. Experienced in building CI/CD pipelines, AWS/Azure infrastructure, and Kubernetes workloads. Proven ability to increase system performance and reduce cloud costs in production. **Seeking Summer 2027 internship.**

Education

University of Ottawa

B.Sc. Honours Computer Science with Co-op (3.95 GPA)

Ottawa, ON

Fall 2023 – Winter 2028

Experience

DevOps Engineer Intern

Jan 2026 – Aug 2026

Magnet Forensics

Ottawa, ON

- Conducted performance deep dives into C#/ASP.NET code, DynamoDB, and Lambda functions; identified and resolved bottlenecks, leading to 50% less CPU usage and doubled production server throughput.
- Designed and led the end-to-end implementation of a reverse proxy using AWS CloudFront, eliminating a top-priority sales blocker for clients requiring static IP allowlisting.
- Executed a company-wide domain migration across multiple AWS Route53 hosted zones; maintained clear communication with 3 engineering teams to minimize risk and downtime.
- Resolved production outages, triaged CloudWatch alarms, and optimized ECS configuration to perform better under load, contributing to a 98% product uptime.
- Deployed a new development environment from scratch using AWS CloudFormation, Certificate Manager, and Route53, while serving as the primary maintainer across all environments.
- Automated load testing using EC2 and Jenkins to validate system scalability under increased customer demand.
- Accelerated feature delivery through a spec-driven workflow using AI assistants (Claude Code, GitHub Copilot) while carefully managing confidential data to ensure secure development.

Cloud Engineer Intern

May 2025 – Dec 2025

Statistics Canada

Ottawa, ON

- Developed an open-source Kubernetes microservice using Go (Golang) to automate cleanup of orphaned storage resources, reducing annual cloud expenses by \$20K.
- Built CI/CD pipelines using GitHub Actions to automate testing, linting, security scans, and Docker containerization.
- Delivered zero-downtime deployments with Argo CD to an Azure Kubernetes Service (AKS) platform of 300+ users.
- Analyzed Python data processing library using memory profilers, identifying peak usage improvements of 5% across 100GB+ datasets.

Projects

Pyvidplayer2 API | <https://github.com/anrayliu/pyvidplayer2>

July 2023 – Present

- Pioneered an open-source Python video library with 60K+ downloads and 3+ years of active maintenance.
- Collaborated with open-source developers to resolve 50+ GitHub issues; developed templates and detailed documentation to maintain industry standards and code quality.
- Automated PyPI builds and releases with GitHub Actions using protected environments and OIDC authentication.

Skills and Certifications

- Skills:** Python, Go, AWS, Azure, Linux, Kubernetes, Docker, Argo CD, Jenkins, GitHub Actions, Azure Pipelines
- Canadian Computing Contest (Senior) – Certificate of Distinction (Top 25%), 2023