Quan Nguyen

(480) 862-4827 | Tempe, AZ, 85282 | quannguyenanhnaq@gmail.com | LinkedIn | GitHub | Portfolio | Green Card

EDUCATION & CERTIFICATION

Arizona State University *Bachelor of Science in Computer Science* — Cumulative GPA: 3.7/4.0
Arizona State University *Master of Science in Computer Engineering* — Expected May 2027
Certificate(s): *AWS Certified Cloud Practitioner (ID: AWS03875902)*
Relevant Coursework: *Data Structures and Algorithms, Software QA and Testing, Distributed Software Development, Distributed Database, Cloud Computing, Operating System, Scrum Methodologies, Machine Learning*

EXPERIENCE

Next Lab — Oct 2025 – Current
Associate — *Tempe, AZ*
- Incoming member of **AI Guild**, applying state-of-the-art deep learning architectures to improve education.

Maricopa County Attorney Office — August 2024 – May 2025
Software Engineer Intern — *Phoenix, AZ*
- Led a greenfield project w/ a team of 5 interns, deploying an enterprise-grade report-writing system using **React.js** and **ASP.NET Core**, backed by **SQL Server** database and hosted on-premises with Windows Server.
- Built **20+ RESTful API** endpoints w/ Swagger, integrated Open XML SDK and Aspose.PDF for templates and redaction.
- Leveraged EF Core for initial data migrations, designed CI/CD pipelines w/ **Docker** and **Azure DevOps**, and followed Scrum Agile practices which enabled project completion 2 weeks ahead of schedule.

Crown Castle — June 2024 – August 2024
Software Engineer Intern — *Houston, TX*
- Streamlined the fiber network search engine w/ **Flask** and **Neo4j**, replacing a legacy relational architecture with high-performing graph structures, deployed to production for **30+** fiber sales engineers with asynchronously query execution.
- Optimized the ETL pipeline by batching and indexing **500k+** data objects and vertices, reduced query process time by **47%**.
- Containerized and tested services w/ **Docker** and **GitLab CI**, integrating **Prometheus** and **Grafana** for performance monitoring, error tracking (<2 issues/week), and weekly Scrum Meet documentation.

AWS Cloud Innovation Center — August 2023 – May 2025
Teaching Assistant — *Tempe, AZ*
- Taught AWS services such as **S3, Lambda, EC2, load balancers, and Kubernetes** through concepts and hands-on labs.
- Introduced networking basics including cryptography, TCP/IP, TLS/SSL, and beginner programming with HTML and CSS.
- Automated weekly grading pipeline w/ **Lambda** serverless scheduling and Canvas API, reduced manual workload by **95%**.

PROJECTS

Global Internet Traffic Tracker | ASP.NET Core, Razor, Postgres, Vercel, Azure Functions, Supabase
- Developed a full-stack web application to track global internet usage by country using ITU and World Bank datasets.
- Used **GitHub Actions** for automated deployment pipelines and used **Docker** for consistent cross-platform development.
- Added unit and integration tests with **xUnit**, code quality checks, and maintained comprehensive technical documentation.

ML Benchmark in Chest X-ray | Python, Pytorch, TensorFlow, Pandas, NumPy
- Trained **deep learning** models (e.g. UNet, ConvNext, SWIN, etc.) using publicly available 2D and 3D datasets of Chest X-rays for producing new baselines of medical image classification, localization, and segmentation tasks, **beating by ~5-10%.**
- Utilized **SLURM** on ASU's Sol HPC cluster within **Linux** to run large-scale computations and track performance metrics.

AI Text Detector Using NLP | Python, Pytorch, scikit-learn, Pandas, NumPy, Corpus, Jupyter Notebook
- Developed a novel human vs. AI text classification method using pretrained model **BERT**, producing **90% class accuracy**.
- Implemented and compared classical ML algorithms against state-of-the-art Transformer-based models for baselines.

TECHNICAL SKILLS

Languages: Python, C#, C/C++, shell/bash, SQL (Postgres), Cypher, TypeScript, JavaScript, Latex
Frameworks: ASP.NET Core, Flask, React.js, Node.js, Neo4j, PostgreSQL, Prometheus, Grafana, Azure, AWS, SLURM
Operating System & Tools: Linux (Ubuntu), Windows 11, Unix, PowerShell, macOS, iOS, Git, Docker, Postman, VS Code, Visual Studio, Figma