Peter Do

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EDUCATION

Virginia Tech Blacksburg, Virginia

B.S. in Computer Science, Minor in Mathematics

Expected Graduation, December 2025

Master of Engineering in Computer Science and Applications

Expected Graduation, December 2026

GPA: 3.60/4.00

Coursework: Data Structures & Algorithms, Mobile Software Development (iOS), Computer Organization, Introduction to AI, Intermediate Software Design & Engineering, Computer Systems, Data and Algorithm Analysis

EXPERIENCE

Collins Aerospace (RTX) Remote

Engineering Application Development Intern

June 2025 - August 2025

- Architected a MongoDB automation platform using Crossplane XRDs, Kubernetes, Helm charts, and Argo CD GitOps, developing end-to-end CI/CD pipelines that accelerated database provisioning by 80%.
- Deployed a Docker-based Borg backup service via Puppet, running daily multi-threaded MySQL dumps to Borg, cutting the backup window from 2.5 hours to 30 minutes and enabling rapid restores for critical databases.
- Executed the migration of enterprise-scale AWS infrastructure from a deprecated legacy environment to new cloud environments, establishing standardized migration patterns and documentation to streamline future application transitions.

Knowmadics Remote

Associate Business Analyst

August 2024 - Present

- Created detailed requirement documents for 2 flagship products by conducting weekly stakeholder interviews across international teams, resulting in reduced specification ambiguity and accelerated development cycles.
- Engineered internal automation tools that streamlined software version release processes, reducing deployment time by 25%.

Software Engineering & Product Management Intern

May 2024 - August 2024

- Developed automated REST API test suites for a personnel tracking system using Postman, achieving 99% functionality coverage across 50+ endpoints and reduced production bugs by 30% through C# and .NET backend enhancements.
- Created 20+ Angular is components including dynamic data tables and interactive dashboards for improved user experience.
- Led end-to-end QA testing for web and mobile applications across 6 Agile sprints, creating structured test plans and managing bug lifecycles in Jira and Azure Boards to reduce average issue resolution time by 20%.

Remote Nora AI

Software Engineering Intern

June 2024 - August 2024

- Developed key backend features for an AI mock-interviewer platform using ASP.NET Core, including interview session management and response analysis endpoints, while creating comprehensive Swagger documentation for 20+ API endpoints.
- Converted Figma wireframes into 15+ reusable React components powering a platform used by 1000+ active users.

PROJECTS

GreenThreads | React, JavaScript, Bootstrap, Python, Flask, Selenium, BeautifulSoup4, DynamoDB, AWS Cognito March 2024

- Built a full-stack web application that promotes eco-friendly shopping by offering secondhand alternatives to fast fashion.
- Implemented web scraping functionality through BeautifulSoup4, Selenium, and the Google Shopping API in Python.

MLViz | NumPy, Python, Next.js, Tailwind, AWS ECS

March 2025

- Developed a customizable neural network from scratch implementing feedforward and backpropagation algorithms.
- Achieved 97% accuracy with a 4-layer architecture on identifying written numbers, showcasing effective learning.
- Deployed an interactive Next.js and Tailwind interface enabling users to visualize neural network architecture with D3.js.

Network Speed Monitor | Go, Fyne, SQLite

July 2025

Built a cross-platform desktop application to monitor real time upload/download speeds across multiple interfaces with live raster-based charts, persisting up to one week of data in SQLite and providing configurable threshold alerts.

Programming: Python, JavaScript, Java, C#, TypeScript, Golang, Dart, Swift, Kotlin, C, C++, SQL, HTML/CSS

Frameworks/Databases: React.js, Angular.js, Next.js, Flutter, Flask, Spring Boot, MongoDB, Express.js, Postgres

Tools: Amazon Web Services, Kubernetes, Crossplane, Postman, PyTorch, Jira, Docker, Azure, Pandas, NumPy, Git, Swagger