

Peter Do

U.S. Citizen | pdoo2004@gmail.com | 571-577-5669 | LinkedIn: [peterdovt](#) | GitHub: [pdoo2004](#) | Portfolio: <https://peterdo.work>

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:** 3.61/4.00
- **Coursework:** Data Structures & Algorithms, Mobile Software Development (iOS), Introduction to AI, Software Design, Computer Systems, Data and Algorithm Analysis, AI Tools

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 - May 2025

- 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 releases, 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.js 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%.

Nora AI

Remote

Software Engineering Intern

June 2024 - August 2024

- Developed key backend features for an AI mock-interviewer platform using ASP.NET Core, fine-tuning OpenAI GPT Models to achieve 90% accuracy in candidate performance evaluation across 100+ interview sessions.
- 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

- 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 – Custom Neural Network | NumPy, Python, Next.js, Tailwind, Docker, AWS ECS

- 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

- 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.

BridgeDesk.xyz | Next.js, Tailwind, DynamoDB, S3

- Developed a platform to help remote teams build a work culture, 100+ active users, awarded \$500+ in university funding.

SKILLS

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

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

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