

# Trevor Cooley

Tallahassee, Florida | 239-888-5495 | [trevordcooley@gmail.com](mailto:trevordcooley@gmail.com) | <https://www.linkedin.com/in/tdcooley>

## Education

<b>Master of Business Administration (MBA) - Part Time</b> Florida State University – Tallahassee, FL.	Expected: May 2028
<b>Bachelor of Science, Computer Science. GPA: 3.6 / 4.0</b> Florida State University – Tallahassee, FL.	May 2025
<b>Associate of Arts (AA), General Studies. GPA 3.9 / 4.0</b> Florida SouthWestern State College - Fort Myers, FL. <i>Honors/Awards:</i> Dual Enrollment   Graduated With Honors   Dean's List 4 semesters   Phi Theta Kappa Honor Society	May 2022

## Technical Skills

**Languages:** C/C++, C#, Rust, XAML, Python, JavaScript, HTML, CSS, Java, SQL, Lua, Go / Golang

**Technologies/Tools:** Git / Github, Flask, Azure (VM/Networking), NoSQL, Kubernetes, CI/CD, AWS (EC2), Linux/Unix, NumPy, .NET, MAUI, PostgreSQL, Docker

## Projects

<b>Bar Stool Management Linux Kernel Module</b> - Tallahassee, FL	May 2025 - Aug 2025
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- Developed a backend operating systems Linux kernel module in C with three custom system calls (open\_bar, bar\_group\_arrive, close\_bar), implementing a multi-threaded server system with kthreads and mutex locks for concurrent bar waiting list management and resource allocation
- Created a comprehensive simulation system with server threads for customer seating and table cleaning operations, using linked lists for dynamic waiting queue management and optimized first-fit resource allocation
- Designed proc filesystem interfaces to monitor real-time system status, track performance metrics including customer satisfaction ratings, and visualize resource utilization across four tables

<b>AI-Powered Thematic Music Database Recommendation System</b> - Tallahassee, FL	Jan 2025 – April 2025
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- Implemented machine learning K-means clustering to categorize songs based on audio features (tempo, danceability, energy, and loudness) from the Million Song Dataset in a full-stack Flask (Python) web application with HTML, CSS, and JavaScript
- Engineered a PostgreSQL database in BCNF with 5 entities (Artist, Song, User, Playlist, Playlist\_Song) maintaining referential integrity across 4 relationships while optimizing for query performance
- Designed feature-rich user interfaces enabling music discovery and recommendation through thematic audio clusters, personalized playlist management, and a search function to find similar songs based on audio characteristics

<b>Ecommerce InventoryShop App</b> - Tallahassee, FL	June 2024 – Aug 2024
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- Engineered a C# console application and migrated it to a full-stack .NET MAUI application, implementing a comprehensive inventory management system with CRUD operations under an MVVM architecture
- Implemented shopping cart functionality featuring real-time price calculations, item management, and checkout
- Built configuration system enabling dynamic tax rates, BOGO feature, item markdowns, and multi-cart wishlist
- Built REST APIs / RESTful WebAPI with Swagger integration to support inventory CRUD operations for distributed systems

## Experience

<b>Captainpcparts (eBay Business)/MKJP Enterprises LLC</b> – Fort Myers, FL. <b>Computer Hardware Technician &amp; Computer Parts Packager</b>	Aug 2022 – Dec 2022
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- Streamlined packaging operations to consistently process high-volume orders, regularly reducing daily backlog from 20+ to near-zero/1-3 remaining orders
- Performed comprehensive hardware diagnostics using POST testing, multimeters, and diagnostic tools to verify functionality of CPUs, GPUs, motherboards, and other computer components while preparing parts for shipment