Andrew Wulff

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EDUCATION

Virginia Tech — Blacksburg, VA
Bachelor of Science in Computer Science, Minor in Mathematics — *Expected Graduation May 2027*
GPA: 3.83/4.00 | **In-Major GPA**: 3.95/4.00
Dean's List with Distinction: Fall 2023 - Spring 2025

EXPERIENCE

Founding/Full-Stack Software Engineer — Feb. 2025 – Present
DDNOW — *Blacksburg, VA*
- Designed and implemented organization onboarding, enabling clubs to register organizations, create admin accounts, and enforce organization-scoped data and permissions
- Built an administrator control layer allowing org admins to configure driver and rider behavior via organization-specific settings
- Contributed to stabilizing the app for TestFlight deployment through debugging, integration, and refinement of core workflows; supported live MVP demos with real users

Pro Shop Attendant — May 2025 – Aug. 2025
River Creek Golf Club — *Leesburg, VA*
- Developed expertise in sales and customer service by effectively communicating with customers, identifying needs, and providing tailored product recommendations to enhance satisfaction

Golf Sales & Service Specialist — Nov. 2022 – Aug. 2024
Dick's Sporting Goods — *Sterling, VA*
- Delivered personalized customer service by advising players on equipment, driving sales, and ensuring high levels of satisfaction

PROJECTS

ATC System | *Java* — Nov. 2025 – Dec. 2025
- Developed a 3D Air Traffic Control system in Java using Skip Lists and Binary Spatial Trees for efficient object tracking and collision detection
- Implemented dual-indexing architecture supporting both name-based queries and spatial range searches across a 1024 x 1024 x 1024 coordinate space
- Designed object-oriented hierarchy for 5 aircraft types with comprehensive validation and bounding box intersection algorithms

FinanceFlow | *TypeScript, Next.js 14, Express, PostgreSQL, Prisma, Redis, Docker* — Aug. 2023 – Present
- Developed a full-stack finance tracker with Express REST API and Next.js frontend supporting transaction management and budget tracking
- Implemented secure authentication system using JWT with refresh tokens, Argon2 hashing, and rate limiting middleware
- Added a service to generate spending insights and category breakdowns using PostgreSQL and Redis caching

Fraternity Website | *HTML, CSS, JavaScript* — April 2024 – Present
- Redesigned and deployed a responsive website to onboard new students and streamline fraternity communications
- Implemented features such as an email subscription system, improving outreach to 200+ members and alumni

Stock Price Assistant | *Python, Twilio API, Alpha Vantage API, YAML, SQLite* — Aug. 2023 – Sep. 2023
- Developed a stock assistant with automated SMS/email alerts for scheduled updates and threshold-based changes
- Built modular Python architecture using Alpha Vantage API and Twilio with SQLite database for price tracking
- Created CLI tool using Click/Rich for watchlist management and updated legacy codebase to 2,000+ lines of production code

TECHNICAL SKILLS

Languages: Java, Python, C/C++, x86 Assembly, Dart, SQL (Postgres), JavaScript, HTML/CSS
Frameworks: Flutter, React Native, Flask, JUnit
Developer Tools: Git, Docker, VS Code, Visual Studio, Eclipse