Miles Brandl

Farmingdale, NJ | brandlm1@tcnj.edu | +1 201-844-1268 | Portfolio: milesbrandl.com



EDUCATION

The College of New Jersey (TCNJ), Ewing, NJ

December, 2025

B.S. in Computer Science

RELEVANT COURSEWORK

Computational Problem Solving; Analysis of Algorithms; Computer Architecture; Computer Networking; Cryptography & Cyber Security; Natural Language Processing; Software Engineering

SKILLS

Technical: Java, C++, C, Python, JavaScript, Ruby on Rails, VSCode, Github, Adobe Creative Cloud, WordPress ACF Additional Skills: Teamwork, Problem-Solving, Risk Management, Interpersonal Skills, Creativity, Work Ethic Languages: Mandarin (Beginner-Intermediate)

PROJECTS

Anti-Poaching Patrol Route Optimization Algorithm

January 2025 - Present

• Developed a metaheuristic optimization algorithm in python for anti-poaching patrol routes in the Tost Tosonbumba Nature Reserve, implementing dynamic weight adjustments and spatial-temporal analysis to maximize coverage of high-risk areas while maintaining efficient resource utilization.

Hack TCNJ Hackathon Winner

February 23, 2025

- Project Granted Social Impact Award
- Engineered and deployed a React-based Javascript financial estimation tool for the American Prairie's Wild Sky program, educating and empowering Montana ranchers to take up conservation incentives, requiring extensive research on agricultural practices and regional biodiversity while crafting a scalable blueprint for the program.

Mayo Business Plan Competition Participant

December 2025 - February 2025

- Organized and led a 3-person team conducting intensive technical and market research for the current U.S. telecommunications infrastructure.
- Developed a comprehensive business plan for PRISM Solutions' optical modulator technology for next generation thin-substrate optical modulators, with strategic input from industry advisors.

PROFESSIONAL EXPERIENCE

WordPress Designer, Avanti Branding, Orlando, FL

Fall 2024

• Contracted to design sitemaps and WordPress websites for a law firm and Sea Turtle Conservancy while collaborating with clients and superiors to ensure client satisfaction.

Pyrotechnician, Pyrotecnico, Trenton and Philadelphia, NJ

Summer 2024

• Set up and executed commercial firework displays, following strict safety protocols and coordinating with team members to ensure proper timing and safe operation.

Subject Specialist Tutor, Well Rounded Tutors, Ewing, NJ

Fall 2022 - Spring 2023

• Crafted and instructed custom lesson plans for secondary education students; assisting with coursework to improve their academic performance in mathematics, sciences, and introductory computer science courses.

LEADERSHIP/ACTIVITIES

Vice President of TCNJ Student Film Club, Ewing, NJ Part-Time Volunteer Firefighting, Farmingdale FD, Farmingdale, NJ Intermittent Volunteer Tipi Raisers, Boulder, CO Fall 2024- Present Spring 2018-Present Spring 2017-Present