Dylan A. Benzi

Objective

Computer Engineering student at Georgia Tech with hands-on experience in custom PCB design and embedded microcontroller systems. Complemented by data analysis experience from research and industry internships. Seeking a hardware internship in summer 2027 to apply embedded and digital systems skills towards production-level projects.

Education

Georgia Institute of Technology | Atlanta, GA *August 2026 – Present*
Bachelor of Science in Computer Engineering, Clubs: SiliconJackets, Nanotechnology and Photonics Expected Graduation 2028
Florida Gulf Coast University | Fort Myers, FL *June 2024 – May 2026*
Bachelor of Science in Software Engineering, 67 Credit Hours, GPA 3.92

Skills

Programming: C, C++, JavaScript, TypeScript, HTML, CSS, Python, R, SQL, AVR Assembly, LaTeX
Embedded/Hardware: I2C, SPI, UART, interrupt-driven & bare-metal/register-level firmware, multilayer PCB layout, SMD soldering
Platforms: Linux (Debian, Ubuntu Desktop/Server, Arch), Proxmox VE, Docker
Hardware and Instruments: STM32, ESP32, Raspberry Pi, Arduino, oscilloscope, logic analyzer, multimeter
Software: Git & GitHub, VMs, Fusion 360, KiCad, PostgreSQL, GIS

Experience

Okami Capital | Remote/Naples, FL *July 2023 – Present*
Co-Founder and Partner
Alternative investment company raising funding for early to mid-stage private companies and assists in exits of existing shareholders.
- Raised over $700k from investors in consumer and enterprise sectors, manages over $7m in Okami Fund I
- Led negotiations on deal terms and structure for early to mid-stage private placements working directly with founders
- Held FINRA SIE, Series 63, and Series 82 licenses under a broker-dealer with Okami acting as the boutique front-end for deals

TVEyes | Remote *July 2025 – May 2026*
Market and Data Analysis Intern
- Designed a multi-factor customer tiering in R by consolidating data across multiple internal systems, databases, and CMSs
- Classification system used to determine customer priority for over 1,000 accounts by using usage metrics and account value

Research

Hurricane Impacts | Dr. Joanne Muller, FGCU *March 2025 – May 2026*
Undergraduate Research Assistant
- Quantified cost normalization effects on 100+ years of storm data, isolating meteorological, demographic, and economic drivers
- Developed a fatality dataset consisting of over 700 storms from the past 60+ years for all direct storm deaths
- Co-authored two papers published in *Nature npj Natural Hazards* and one in *AGU Earth and Space Sciences*

Projects

Astrophotography Device Management PCB *November 2024 – February 2025*
Designed a custom PCB for astrophotography power and device management featuring an STM32 MCU, MOSFET switching for power management, PWM for dew heaters, and a USB 3.0 hub for imaging and other devices.
- Selected components and optimized footprints for mostly automated assembly
- Routed high-amperage power rails, USB 3.0 signal traces, and PWM switching lines on a single board

K.T.A.N.E. Puzzle Game *January 2026 – May 2026*
Hardware game implementation of the game Keep Talking and Nobody Explodes on an Arduino system written in AVR assembly.
- Over 2000 lines of handwritten AVR assembly controlling timers, randomization, game state, and interaction
- Inputs from buttons, wires, and outputs to LEDs, shift registers, segmented displays, and buzzer

Self-Hosted Infrastructure & Network Architecture *January 2020 – Present*
Architected and maintain a Proxmox server with multiple networks and VMs/containers. SSO and GPU passthrough across the stack.
- Configured Cloudflare proxying for public-facing services and Tailscale for internal access, with documentation across all utilities

Hurricane Impact DataViz Platform (R Shiny, PostgreSQL & PostGIS, Leaflet, Bootstrap) *March 2025 – May 2026*
Designed and built a full-stack data visualization web app supporting our research findings with geospatial dataset integration.
- Engineered database and web app containing over 700 storms of in-house research data, hosted at hurricane.dylanbenzi.com

Relevant Coursework

Data Structures & Algorithms, C/C++, Comp Org and Assembly, Discrete Math, Calculus I-III, Physics I-II, Differential Equations, Linear Algebra (ongoing), Digital System Design (ongoing), Digital Design Lab (Spring), Circuit Analysis (Spring), Prog. for HW/SW Sys (Spring)