PEDRO FISCHETTI

Camden, SC 29020 | (754) 214-1434 | ✉ PedroF@email.sc.edu | in linkedin.com/in/pedro-fischetti | ⓖ github.com/Fischetti22

Education

University of South Carolina — Columbia, SC
Bachelor of Science in Computer Engineering, GPA: 3.50 — **Dec 2025**

USCG Federal Maritime Boarding Officer School — North Charleston, SC
Secret Security Clearance (Active until 2027) — **Dec 2020**

Related & Professional Experience

United States Coast Guard — Various Locations
Machinery Technician 2nd Class (Active Duty) — **Feb 2016 – Dec 2023**

- Maintained mission-critical engineering/electronic systems aboard cutters; diagnosed and resolved failures to ensure mission continuity.
- Led hazardous-materials handling during dry-dock (8k gal fuel oil, 330 gal lube oil, 660 gal coolant) with zero incidents.
- Certified Instructor & Firearms Coach; improved team readiness via advanced training programs.

Best Buy — Coral Springs, FL
Connections Manager — **Aug 2013 – Dec 2015**

- Led 70+ member team through major industry transition, consistently exceeding $100K daily sales targets; implemented standardized onboarding that improved ramp-up time.

Project Experience

NFL ELO Predictor — GitHub | *Streamlit, Pandas, NumPy, Requests, lxml* — **2025**

- Built an interactive **Streamlit** app that ranks weekly "safest picks" for a suicide pool by blending ELO ratings with team statistics.
- Ingested ESPN schedules with PFR fallback (`pandas.read_html` + lxml); automated weekly updates.

IoT Multi-Display Task Manager | *ESP32, WiFi, HTTPS, JSON APIs* — **2024**

- Engineered an ESP32 IoT system with **3** SSD1306 displays via I2C multiplexers; secure HTTPS **REST** (JSON) and CI checks (GitHub Actions).

Home Server & IoT Hub | *Raspberry Pi, Docker, GitHub Actions* — **2024**

- Built Raspberry Pi (**Linux**) home server and IoT hub; deployed **4+ Docker** containers (Home Assistant, live notes, vegan cookbook, educational game); added GitHub Actions workflow to lint/test container definitions; integrated Azure-hosted n8n workflows leveraging AI chat bots to automate notifications and task routing.

Smart Lights Control GUI | *Flask, REST, SQLite* — **2024**

- Built a Flask-based web GUI to control LIFX lights via REST; secured token via environment variable and logged actions to SQLite for auditability.

ArduinoGotchi - Tamagotchi Emulator | *C/C++, Arduino UNO, SSD1306* — **2024**

- Implemented a P1 Tamagotchi emulator under **32KB Flash/2KB RAM** with a custom HAL and optimized LCD bit-manipulation rendering.

Healthcare Automation Script | *Bash, ODS→HTML* — **2024**

- Automated competency tracking/reporting by parsing ODS inputs and generating HTML outputs; reduced manual processing.

Technical Skills

Languages: Python, C, C++, Java, JavaScript/Node.js,Typescript, Swift, SQL, MATLAB, Bash, HTML, CSS
Embedded Systems: Arduino (UNO, ESP32, Nano, Mega), I2C/SPI/UART/PWM/GPIO, memory optimization
Tools: Arduino IDE/CLI, Git, CI/CD (GitHub Actions), NVM, Zsh, Fusion 360, Bambu Studio, LTSpice, Docker/Compose, Linux, SQLite, Azure, N8N, ngrok
Frameworks/Libraries: Flask, Streamlit, REST, Glitch, Pandas, NumPy, PyTorch, Tensorflow, Sklean, Whisper, MoviePy, Adafruit (SSD1306, GFX, BusIO), U8g2, WiFiManager, ArduinoJson, Google Test
Specialties: Data scraping (pandas.read_html/lxml), web APIs, IoT, real-time, digital logic
Languages: Portuguese (Native), Spanish (Conversational), English (Fluent)