Nick Whipple

Project Portfolio at NickWhipple.com

512-788-7018
nick.a.whipple@gmail.com
linkedin.com/in/nicholas-whipple/

Education

Texas State University - *Bachelor's in Electrical Engineering & Computer Science*   **Graduated May 2025**

★ Senior Design "**Best Project - Faculty Choice**" award winner for our team's Android app controlled robotic drawing arm.
- Programmed **ESP32** with **FreeRTOS** and **WebSocket** communication for real-time control
- Developed cross-platform mobile interface using **Android** and **Flutter**
- Applied **Agile Software Development** Methodology to manage team workflow and versioning with **Git**
- Designed and built custom hardware with **Arduino**, **Raspberry Pi**, and **Embedded Systems**
- Modeled and simulated analog and digital circuits using **LTSpice**, **MATLAB**, and **PID** Controller logic
- Designed CMOS logic circuits using **Microwind** for layout and **CMOS design** optimization
- Coded **object-oriented** applications in **Java**, utilizing **UML** diagrams for system architecture
- Developed **C++** software and **Python** scripts for data processing and control systems
- Created virtual environments for development using **Linux** and **VirtualBox**
- Prototyped and tested physical designs with **3D printing** and iterative fabrication tools

Work Experience

HEB Pharmacy - *Pharmacy Technician*   **2022 - Present**
- Assisted customers by typing new prescriptions and vaccinations, billing insurances, answering non-medical medication and administrative questions, and finalizing sale of medications.
- Obtained and filled medications, ensuring accuracy of the medication using NDC and photo verification system

City of Austin, Wireless Communications - *Radio Technician*   **2011 - 2017**

★ Regularly assigned to **troubleshoot previously unfamiliar** electronics by relying on my own knowledge and technical research.
- Performed advanced electronics repair and integration in police, fire, and EMS vehicles
- Diagnosed and repaired radio systems, mobile data, and 12V power systems
- Integrated emergency systems including **Tomar, Whelen, Code 3** siren and lightbar units
- Installed and troubleshot **Panasonic Arbitrator** video/audio recorders, **Panasonic Toughbook's**, and **Stalker DSR** radar systems
- Installed and maintained **Motorola** radios including **XPR 7500**, **XTS 2500**, and **APX 7500**
- Supported and configured **David Clark Vehicle Intercom** Systems and **Knox** key systems
- Used **soldering**, **multimeter**, and **oscilloscope** for diagnostics and component-level repairs

United States Marine Corps - *Radio Systems Technician*   **2006 - 2011**

★ Awarded a **personal decoration** for technical expertise and job performance
- Earned **Microsoft Certified Systems Engineer (MCSE)** certification; managed Windows Server 2003 network including **Exchange Server** email and **VoIP telephone system**
- Installed and configured **Active Directory** for secure communications support
- Implemented **Cisco IPICS** to bridge VoIP and radio system communications
- Monitored network health using **SolarWinds Network Monitor**
- Performed advanced electronics repair on VHF, UHF, HF, and SATCOM radio systems.
- Diagnosed and serviced vehicle-mounted radio systems, antennas, and cryptographic devices to ensure secure and reliable tactical communications