# Miles Barrios

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## Experience

Microchip Inc.

October 2021 - Current

Chandler, AZ

 $Software\ Engineer\ II$ 

- Designed, developed, and supported embedded systems applications for the Wireless Solutions Group
- Reduced customer application development time by over 50% through improvements to the Net Service module in MPLAB. This was achieved by implementing GUI enhancements using Python and C that simplified configuration and automated C source code generation for chip applications
- Developed a module in C that enhanced the GPIO, ADC, and PWM capabilities on an existing MCU. This module was a part of an effort to increase the short-term revenue for the Wireless Solutions Group
- Assisted in the testing and development of the Boot ROM for a wireless chip using Python, C, and Emulator platforms

State Farm Tempe, AZ

 $Infrastructure\ Analyst$ 

May 2021 - October 2021

- In-depth work on the Availability Management Tooling team
- Facilitated biweekly syncs with client regarding features and bugs to be addressed
- Tracked availability for 100+ applications at State Farm using open source technologies including the Elastic Stack, Selenium, Docker, and Jenkins

State Farm Tempe, AZ

Enterprise Technology Intern

May 2020 - April 2021

- Contributed to a customer facing software development team with focus on development of a VSCode extension pack that simplified the modification of various data files.
- Developed the VSCode extension pack using React.js, Javascript, HTML, and CSS

## Education

#### Northern Arizona University

Bachelor of Science in Computer Science

Flagstaff, AZ

Aug. 2017 - May. 2021

#### Programming Skills

- Python
- C
- Embedded Systems

- Git
- Javascript
- REST API Development

#### **Projects**

# Senior Capstone Project

• Developed a full-stack web application using React.js and C# to provide NAU researchers with a GUI for viewing asteroid observations from the Zwicky Transient Facility

## StateFarm Hackday Project

• Created a React application to track code reviews for GitLab users across all groups and projects within those groups, utilizing React and Axios to display merge requests on a single-page application

# Operating System Simulator

• Developed a non-trivial operating system simulator project over the course of a semester, implementing concepts such as PCBs, memory management, and concurrency using C