

Full-Stack Software Engineer

With expertise in multiple programming languages spanning frontend and backend development, I've spearheaded the design and implementation of numerous features, collaborating with diverse teams to ensure successful project delivery. Passionate about mentorship, I've enjoyed guiding others through their career journeys, fostering a culture of learning and growth. Now seeking an environment where I can continue to expand my skills and contribute to impactful projects, I'm eager to join a team that values innovation and offers opportunities for personal and professional development.

Experience

Senior Software Engineer – Broadcom Inc. (formerly VMware)

July 2023 – Present

- Developed an event-based indexing service using Golang and OpenSearch, enhancing search efficiency across the Workspace One Platform.
- Implemented new features and resolve bugs in the Workspace One Platform using .NET (both regular and Core) and Angular.
- Designed and implemented a utility to compare data between systems, identifying and resolving multiple synchronization issues.
- Evaluated feature design documents for performance, security, and overall quality improvements.
- Actively participated in agile scrum activities, including daily standups, grooming sessions, and planning meetings.

Senior Software Engineer – Meta Platforms, Inc.

March 2022 – June 2023

- Noticing that documentation was severely lacking for internal Bloks scripting framework, organized a hackathon to fully document all scripting functions, along with creating a tool to integrate inline documentation from Bloks source code into the existing wiki, similar to Javadoc and other documentation generators.
- Identified several problems and inefficiencies with the Bloks build process and corrected them.
- Worked with other internal teams that used Bloks framework to identify improvements that could be made to it.
- Implemented internal A/B testing framework with Bloks with the involvement of A/B testing framework team.

Software Architect – NCR Corporation

July 2019 – March 2022

- Guided an SRE team of 20 developers, overseeing the entire infrastructure of the Business Support Platform.
- Orchestrated the cloud migration of the Business Support Platform from Amazon Web Services to Google Cloud Platform.
- Collaborated with internal business units to facilitate their transitions to GCP, providing comprehensive support and guidance.
- Developed Terraform modules to standardize and streamline deployments across the Business Support Platform.
- Developed a range of tools and frameworks utilizing Python and shell scripts to streamline and automate internal procedures.

Technical Lead – NCR Corporation

July 2018 – July 2019

Senior Software Engineer – Tin Roof Software (contractor for NCR Corporation)

December 2017 – July 2018

- Guided the development of the NCR Developer Experience (developer.ncr.com) using .NET Core and Angular, providing developers access to NCR API documentation and enabling administrators to manage organizational settings and configure various internal platform features.
- Collaborated with cross-functional development teams to meet their requirements and ensure the availability of necessary functionalities.
- Provided support to team members through personalized assistance, group training sessions, and informational meetings on various topics.

Application Architect – TalentQuest (Corporate Psychology Resources, Inc.)

February 2015 – December 2017

- Guided multiple internal development teams, comprising approximately 50 developers across the US and India.
- Created and reviewed technical design documents for new features and capabilities.
- Orchestrated a user interface redesign project, including the migration from ASP.NET MVC to Angular.
- Optimized application performance across both backend and frontend components.
- Supported team members through personalized assistance, group training sessions, and informational meetings on various topics.

Other positions held during tenure: Technical Lead, Senior Software Engineer.

Team Lead – Rev.ioAugust 2009 – February 2015

- Led a 3-person professional services development team, achieving regular billing of approximately \$50k per month.
- Collaborated directly with customers for requirements gathering, training, and general support and problem-solving.
- Ensured client development commitments were feasible and completed on time.
- Created technical design documents for new features and capabilities.
- Regularly integrated with third-party services, including telephone carriers (Verizon, AT&T) and payment gateways.
- Managed system administration tasks, including overseeing internal applications and phone systems.

Other positions held during tenure: Senior Software Engineer, Software Engineer, Intern.

Education

Master of Science in Computer Science / Software Engineering

December 2015

University of West Florida – Pensacola, FL

Bachelor of Science in Computer Information Systems

May 2010

University of West Florida – Pensacola, FL

Associate of Arts in General Studies

May 2008

Northwest Florida State College – Niceville, FL

Recent Personal Open Source Projects

Ham DBProject URL: <https://github.com/ryanpetris/ham-db>

Language: Python

Application to provide an API for looking up Amateur Radio licenses. Data is synchronized daily with the US FCC and Canadian ISED amateur radio databases, along with DMR and NXDN IDs from radioid.net. A reference deployment is located at <https://api.hamlocator.com/>.

AUR BuilderProject URL: <https://github.com/ryanpetris/aur-builder>

Language: Go

Helper to track and build AUR packages for the Arch Linux distribution.

DNS-SyncProject URL: <https://github.com/ryanpetris/DNS-Sync>

Language: Python

Enables synchronization to/from a standard zonefile and dns provider or between dns providers.

IOT DirectorProject URL: <https://github.com/ryanpetris/IOT-Director>

Language: .NET Core, C#

Talks to Arduino Devices programmed with IOT Director – Arduino to get digital and analog sensor data as well as controlling relays. This information is then used to talk to an MQTT server that interfaces with HomeAssistant. This is ultimately used to interface with door and window sensors, smoke alarms, motion detectors, and devices that need a simple on/off signal such as sirens.

IOT Director – ArduinoProject URL: <https://github.com/ryanpetris/IOT-Director-Arduino>

Language: C

The Arduino component of IOT Director. Requires an Arduino with an ethernet shield.