**Kevin Farley M.S. Computer Science**

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**Education** University of Cincinnati, Cincinnati, OH

April 2017: B.S. Computer Engineering, Minor: Computer Science, G.P.A: 3.595 / 4.0

April 2020: M.S. Computer Science, G.P.A: 3.867 / 4.0

**Skills**

* Main Languages: JavaScript (TypeScript) / Python
* Supplemental Languages and SDKs: Bash / Docker (compose) / Kubernetes (Helm) / ReactJS / Flask
* OS: various Windows systems/ various RedHat, Debian, and Arch based Linux systems, ChibiOS, FreeRTOS
* Tools: Git / Jenkins / GitLab / Atlassian / GitHub / Visual Studio / Make / Mockoon

**Technical Experience:** *over* ***11 years*** *of diverse professional experience from full-time, part-time, and Co-op development roles*

2021-Current *Cyber Software Engineer* **Lead and Engineer for Various Cyber Enterprise (fullstack) Projects**

Cryptic Vector, Cincinnati, OH

* Full-time Engineer responsible for leading, designing, developing, and estimating various cyber enterprise web application solutions. 2.5 years experience as a **full stack tech lead,** coordinating demos, hosting & navigating customer interactions, hosting TEMs with other performer teams, coordinating interface designs and documentation across teams and performers, & running **agile** ceremonies.
* Developed **Python 3.X** based (**RESTful**) API web servers for **Kubernetes (k8s)** deployment over the course of about 4.5 years. Relevant stacks included: **Flask, FastAPI, PostgresQL, Kafka, Faststream, Swagger UI, OAS 3.X**. Relevant container orchestration included: **Helm, Docker Compose, Knative, Kustomize**, etc.
* Developed **ReactJS** driven k8s microservice UIs with  **TypeScript** and **Material UI (MUI)** behind an ingress controller architecture (**traefik**, **istio**) for about 2.5 years. Relevant design tooling included: **Figma** & **Excalidraw**. Notably used **keycloak** for cross-UI authentication between internal and external services.
* Extensive experience in external API integrations, varying scopes of automated testing (**pytest**, **cypress**, **vitest**), and automated build & deployment systems (**Jenkins**, **Artifactory**, **Make**, **Docker**, **pip** / **python-setuptools**).
* Experience in designing and coordinating complex system architectures involving microservices with varying requirements and scopes. Relevant documentation tooling included: **mkdocs**, **mermaidjs**, **Excalidraw**, **Confluence**, and most **Microsoft Office** products.

2017-2021 *Cyber Software Engineer* **Developer and Engineer for Various Cyber and Embedded Projects**

Northrop Grumman (Xetron), Cincinnati, OH

* Full-time Engineer responsible for developing and estimating various computing-based solutions.
* Developed on top of **FreeRTOS** for embedded microcontroller designs for a few months.
* Worked with **C++ / Cuda** for Linux processor and GPU algorithms related to Sat Comm DSP for several months.
* Carried out **VHDL FPGA** design on a Virtix 7 for high speed digital I/O for several months.
* Experience in carrying out and leading **agile** ceremonies (scrum, planning, retro, etc.).
* Developed on **embedded Linux** (C), STM32, ChibiOS, and various imaging devices for several months.
* Worked with **Python** (3.5+), **Bash**, and **Django** development for over a year.
* Used WindRiver / Rhapsody 7 to develop **embedded C++** modules for several months.
* Experience with managing, networking, and interfacing various **Linux VMs** and servers.
* Responsible for **RPM** versioning schema design, **Jenkins** redesigns / task-leading, new Python module designs, and some UI/UX design.

2015-2017 *Software Engineer Co-op* **Consultant and Developer for Software Solutions**

Rippe & Kingston, Cincinnati, OH

* Worked with **C#,** **HTML5**, **CSS3**, and **JavaScript** for **ASP .NET MVC4** web applications backed by **SQL**.
* Used **Git** (BitBucket) for version control and **NUnit** for unit testing, as well as **knockout**, **backbone**, and **jQuery** to structure various site behavior and content.

2016-2017 *Computer Engineering Student* **Co-Designer and Team Lead for Retroactive Audio Recording Project**

University of Cincinnati, Cincinnati, OH

* In charge of managing meetings, schedules, and source control for my Senior Design Project.
* Developed **Android**, **Python**, and **C**. Also designed and debugged pre-board **circuitry**.

2016 *Computer Engineer Student* **Teaching Assistant for Programming Models 1**

University of Cincinnati, Cincinnati, OH

* Mentored and proctored during lab hours for freshman programming course in **MATLAB.**

2016 *Computer Engineering Student* **Designer and Engineer for PIC-based Quad-copter**

University of Cincinnati, Cincinnati, OH

* Designed and implemented a quadcopter using a **PIC32** (developed in **C**).
* Key interfaces include: **I2C** for external **Bluetooth** module, **PWM** for brushless motor controls.

2016 *Software Engineer Co-op* **Developer and Engineer for Shadow Unmanned Aircraft Vehicle**

Textron Systems Unmanned Systems, Baltimore, MD

* Responsible for developing and integrating software solutions relative to Red Hat Linux and Windows 7.
* Worked with **C++ (Qt)**, **batch**, **bash**, **bitbake**, **PowerShell**, and **python** for various programs and scripts to be deployed on the Air Vehicle or Human Machine Interface.
* Used **Mercurial** for version control and **QTest** for unit testing, as well as **Spira Test**, **Jenkins**, **DOORS**, and **Matrix** for various Software Engineering practices.

2015 *Personal Programming Project* **Manage,****Design, and Develop Retro Video Game**

Revolution Uc (hackathon), Cincinnati, OH

* Worked with **Python** (**PyGame** and **PyCharm**) and **git** (**GitHub** for version control).

2015 *Computer Engineering Student* **Hardware Designer of Sequential and Pipelined Control Units**

University of Cincinnati, Cincinnati, OH

* Responsible for designing and implementing sequential and pipelined control units via **logisim.**

2014-2015 *Software Engineer Co-op* **Product Engineering in Teamcenter Integration**

Siemens PLM Software, Milford, OH

* Responsible for creating, editing, and running **automated tests** and utilities for 3D Modeling Software.
* Worked with mainly **C++**: fixing bugs in UI as well as auto-tests which needed to be reported and fixed.

**Activities/Awards:** Dean’s List for most of Undergrad, NSCS, IEEE, ACM, Eagle Scout, Jazz Band, Highschool Involvement Program Mentor, New Hire Navigator, Xetron Golf League, Cryptic Vector Golf League