

Kyle W. Rader

SOFTWARE ENGINEER · TECHNOLOGY ENTHUSIAST

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Skills

Current Languages C# (Dotnet Core/5), Ruby, JavaScript, Bash, Python
Web Rails, React, Ember
Tools Git, Docker, Heroku, Azure Devops, Azure Pipelines, Github Actions

Experience

Senior Software Engineer · MICROSOFT

Redmond, WA

April 2019 - Present · 2 yr 11 mos

I design and build CLI tools and workflows to make Office developers successful and happy using Git, Scalar, and Azure Devops.

- Developed our approach to handling line endings without Git auto-crlf in a 180GB repository. Built an Editor Config based line ending linter and integrated it into pull request linting pipelines.
- Standardized my team's approach for writing cross-platform DotNet Core command line applications by developing a library to abstract and handle the configuration for logging, telemetry, and common CLI options. Our team now has a suite of modern CLI tools using this library making it easier to onboard new hires and for devs to move between different tools we own. Along the way I've advocated for TDD and SOLID design principals.
- Built and developed an Azure Pipelines based build policy to prevent unintentional but catastrophic user actions in our anti-pattern Git branching schema. This regularly catches 3-5% of pull requests in the Office mono repository.
- Helped co-found the Experiences and Devices GLEAM subchapter to support and lift up our LGBTQI+ Microsoft community.
- I've spent two years on the Fix-Hack-Learn v-team organizing and running events for the Office Engineering team three times a year.
- Since December 2020, I've been the interim engineering manager for my team.

Software Engineer · ACTIONSPROUT

Redmond/Bellingham, WA

July 2016 - PRESENT · 1 yr 7 mos

Tools and training to help nonprofits exceed their goals on Facebook.

- Initiated projects such as Rails micro-service generator, Facebook Graph API RubyGem, usage metrics collection and storage service, content recommendation service, JSON web token authentication standards etc. All of which are used daily.
- Pioneered use of Docker/Docker-Compose standardizing developer environments solving the "works on my machine" problem.
- Designed a Neo4j Docker orchestration toolkit for Joyent's Triton platform cutting service costs by over 50%.
- Learned to design micro-services with robust background processing through small, single responsibility, idempotent workers.

Software Development Life Cycle (SDLC) Manager · 8LAS

Bellingham, WA/Shanghai, China

July 2015 - July 2016 · 1 yr

Augmented reality (AR) startup in Bellingham, WA building AR software compatible with the Immy ic60 glasses.

- Lead and organized 5-6 developers using Git, BitBucket, and agile tracking tools.
- In four months moved from a scattered product idea to a beta launch of an AR runtime and SDK codenamed "Catapult".
- Wrote AR demo applications in Unity/C# using Catapult. Ran and managed live demos for customers and potential investors.
- Spent three months in Shanghai after an acqui-hire, integrating development teams and products from Bellingham, WA, Hong Kong, Shanghai, and Chengdu, China. Mission was to build an AR platform on web and mobile technologies.

Production Engineer · WOMP MOBILE

Bellingham, WA

Mar 2015 - Aug 2015 · 6 mos

Website mobilization by consuming client websites and writing HTML/SASS and Javascript/jQuery to produce a mobile device optimized site.

- Helped implement a more streamlined development workflow and client project tracking system.

Web Developer · LOGOS

Bellingham, WA

Jun 2013 - Jan 2014 · 8 mos

Religious study tools, social media, and online publishing. Dev Ops team.

- Projects included RabbitMQ message replay, MySQL cluster dashboard, server patch dashboard, and version controlled MySQL schema migration dashboard.

Software Engineer · BRER TECHNICAL

Bellingham, WA

Apr 2012 - Mar 2014 · 2 yrs

Industrial fiberglass piping analysis company.

- Translated business needs of running a piping test procedure and collecting data into a product definition.
- Built Windows desktop application in C# featuring real-time data collection, visualization, step motor and mega-ohm meter communication.

Graduate & Undergraduate Teaching Assistant · WESTERN WASHINGTON UNIVERSITY

Bellingham, WA

Sept 2011 - Mar 2015 · 3 yrs 6 mos

Taught Intro to Robotics (C), Programming II & Linear Data Structures (Java), and Formal Language & Functional Programming (Lisp/Racket)

- Wrote grading scripts for building, compiling, and testing Java programs.
- Designed and wrote a new lab sequence in Racket providing students with failing tests for test driven development.
- Frequently lectured in labs, ran extended office hours, and maintained excellent student reviews.

Projects

The Great Puzzle Hunt · LEAD SOFTWARE ENGINEER/CO-FOUNDER

<https://greatpuzzlehunt.com>

June 2015 - PRESENT · 2 yrs 5 mos

Annual event drawing around 500 people to Western Washington University to play in a five-puzzle team scavenger hunt around the campus. Teams and volunteers use smartphones to compete on a real-time game platform.

- Client application in ReactJS backed by Meteor and Rails API. Deployed on Digital Ocean behind Nginx for forced TLS.
- Volunteers scan team QR codes to track puzzle start times. Teams solve and enter puzzle answers in the application.
- The web application handles registration/user management, payment web hooks, team formation, ticket redemptions, real-time scoring and game play, and administration tools.

CodeLily Code School · SOFTWARE ENGINEER/CO-FOUNDER

Bellingham, WA

Sept 2014 - Sept 2015 · 1 yr

A Startup Weekend Challenge idea to create a code school with a focus on accessibility for youth and adults switching careers.

- Won crowd favorite at Bellingham Pitchfest Feb 2015.
- Managed a team of four WWU Computer Science seniors building the CodeLily demo platform (similar to CodePen) with AngularJS and NodeJS/Express.

Uzility Agile Kanban System · SOFTWARE ENGINEER

Bellingham, WA

Dec 2013 - Nov 2014 · 11 mos

Uzility was a web based agile software development tool project.

- Learned agile and scrum methodologies from a certified scrum master.
- Migrated code base from CVS to Git.
- Developed front and back-end application with HTML, LESS, PHP, MySQL, and jQuery.

Education

Western Washington University · B.S. COMPUTER SCIENCE · 2014

Bellingham, WA

Sept. 2010 - June. 2014

- 2014 Computer Science Dept. Citizenship award
- 2013 Technology Leader of Tomorrow award from Technology Alliance Group NW (TAGNW)
- Robotics Club President, IEEE Vice President, ACM Activities Coordinator, ACM Mentor

Western Washington University · M.S. COMPUTER SCIENCE COURSEWORK

Bellingham, WA

Sept. 2014 - Expt. Spring. 2018

- In 2018 I had finished all required coursework with a research project remaining but left the program for health reasons.
- Implemented application features at ActionSprout to collect a dataset of Facebook page-to-post voting observations.