

Kyle W. Rader

SOFTWARE ENGINEER · TECHNOLOGY ENTHUSIAST

✉ kyle@kylerader.ninja | 📄 /kyle-rader | 🌐 /in/kylewader

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 2018 - Present · 2 yr 11 mos

I design and build CLI tools and work-flows 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 on-board 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 sub-chapter 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) start up 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 code-named "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 work-flow 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.