

Charles McClung

429 Martin Street, Longmont, CO 80501

Phone: (303)-907-0810 Website: www.charliemcclung.com E-Mail: charlie@cmr1.com

Summary

I am a motivated Software Engineer seeking employment with a dynamic software development team. I am fluent in C/C++ (and basics of most other C flavors), Java, Python, PHP, Ruby, HTML, JavaScript, and CSS. I have had a passion for web programming since before I even knew what programming really was. This passion for web development grew into a desire to understand the foundation of the websites I was working on. This led me to pursue server and system administrator work. I am experienced in most aspects of system administration (including Unix, Mac, and Windows) and I am always looking for fun, new features or services I can implement into my servers. Recently I have been working in depth with devops technologies such as AWS, Vagrant, Ansible, and Docker. I enjoy the challenge of architecting and managing complex, scalable infrastructures.

Skills

- HTML, CSS, JS, PHP, MySQL Expert
- Fluent in SQL & NoSQL, C/C++, Java, Python, Ruby, and most common languages
- Confident with many backend and frontend frameworks including: CodeIgniter, Ruby on Rails, Flask, Django, jQuery, React JS, Angular JS, SocketIO, and more!
- Strong understanding of Object Oriented Programming
- Experience and understanding of MVC frameworks
- Extensive Unix Server Experience (mostly Ubuntu & CentOS)
- Windows Server Experience
- Familiar common providers such as: AWS, DigitalOcean, & Linode
- Experienced with Vagrant, Ansible, Docker, Jenkins, Terraform, and other devops technologies
- Confident working with SVN & GIT
- Familiar with MS Office
- Familiar with common IDE's, API's and SDK's
- Agile Development Methodologies
- Library Design
- API Development
- Active Directory Knowledge
- Experienced in most versions of Unix, OSX, and Windows

Experience

Autodesk – Software engineer

June 2016 - Present

- Hired on as a full time software engineer after the contract
- Continuing to work in NodeJS, on an enterprise level web platform
- Experience working with various storage solutions:
 - MySQL (RDS)
 - Redis (ElastiCache)
 - MongoDB (NoSQL)
 - AWS S3, EFS, ElastiCache , RDS/DynamoDB
- Working on flexible UI components, gained experience with:
 - JS ES6 + NodeJS + NPM
 - React + Redux, AngularJS, Polymer
 - Babel/Browserify/WebPack

Bowtie – SysAdmin/DevOps contract

May 2016 - Present

- Side contract job with local startup for on-call system support
- Handled emergency system outages
 - Troubleshoot application outages and repair/relaunch affected system(s)
 - Available 24/7 to handle emergency system outages
- Refactoring and upgrading (ongoing)
 - Helped lead the way to refactor and rebuild the platform architecture
 - Researched, designed, and implemented new AWS architectural solutions
 - Coordinated architecture updates with refactored software and services
 - Configured CI/CD for refactored system with Jenkins, Ansible, Terraform, Docker, etc.
- Application support
 - Also played a small role in supporting the core Ruby on Rails application
 - Fixing bugs and implementing small features
- Gained significant AWS experience with many different services
 - IAM, EC2/ECS, S3, VPC, EFS, SQS/SNS, RDS, Route53, Lambda, ElastiCache, CloudFront
- Leading architecture/infrastructure rebuild for supporting new platform release
 - Redesigned & rebuilt components/services to be encapsulated, simpler, easier to understand & maintain, and easier to coordinate deployments with more granular CI/CD for each service.
 - Utilizing many new and exciting DevOps & AWS technologies, specifically Docker in ECS and Lambda to achieve this new architecture

Autodesk – Web Developer contract**March 2016 – June 2016**

- Contract position to rebuild the website for the FormIt product team in Boulder
- Researched, devised, and implemented a new website (including infrastructure) in less than 3 months
- First real “hands on” experience with NodeJS
 - Used NodeJS because other developers were somewhat familiar with JavaScript, but not at all with PHP, Ruby, Python, or other potential web languages. Since this was a contract position, wanted to ensure that *someone* was able to maintain the site.
- Getting familiar with NoSQL (MongoDB)
- Built simple provisioning scripts
 - Using Ansible, created simple provisioning playbooks to create local dev machine(s) using vagrant, and also deploy to AWS EC2 instance(s)

CFS - Software Engineer / DevOps Engineer**December 2015 – March 2016**

- Supported a large scale auto-repair loan funding application
 - Application was built using Ruby on Rails.
 - Gained extensive knowledge of Ruby and the Rails framework.
 - Heavily focused on security since a significant amount of personal information is required for loan funding decisions.
 - Focus on the usability of the client-side application.
 - Introduced to the basics of React JS when working with the front end of the system.
- Facilitated integrations with CRM/DMS systems
 - Wrote backend libraries and modules to connect and support integrations with external systems such as PipelineDeals and DealerVault..
 - Utilized tools like Zapier to help “connect the dots” between systems.
- Pursued interest in devops opportunities
 - Quickly learned AWS basics, and was able to augment and restructure network and instance configuration(s).
 - Gained even more experience with Ansible, building several different playbooks in use for several different servers.
 - Began exploring Docker and how it can be tied together with Ansible/ AWS for even more seamless deployments.

Front Range Community College – Taught online PHP web dev course**Spring 2015**

- Used an existing curriculum to teach the basics of web development (HTML, CSS, JS, + PHP & MySQL)
- Had to update specific assignments and assessments that were out of date
- Grading homework assignments and projects
- Mentoring a group of people through their early interests in web development

IMM - Software Engineer**April 2013 – December 2015**

- Enhanced experience in all aspects of web development.
 - Focused mainly in PHP, using CodeIgniter for most frontend websites
 - Furthered abilities and understanding of other web related languages such as JavaScript and CSS
 - Using new frameworks, Smarty-PHP, Handlebars-JS, Bootstrap-HTML/CSS, among others
- Built many useful tools and API's for internal as well as production use
 - Designed and implemented many PHP class structures to ensure logical flow of larger scale projects.
 - Developed automated scripts to undertake simple and repetitive procedures, to help free up time of employees across the company.
 - Numerous backend API's written to be accessed as AJAX calls from a front-end website or application.
- Learning the business and analytics side of the programming world
 - Collaborated with co-workers to improve SEO performance and amplify analytics data.
 - Helped with many updates and improvements to different internal tracking solutions.

Independent Web and Mobile Developer**Since 2003**

- Received first domain as a birthday present in August 2003 and have been in love with web development ever since.
- Experienced in almost every aspect of web development. (HTML, CSS, JavaScript, SQL, PHP, etc...)
 - Built many personal web projects from scratch using PHP
 - Strong experience using MVC frameworks with PHP such as CodeIgniter
 - Also used a Python MVC called "Django" to develop dynamic web applications
 - Recently started experimenting with Ruby on Rails applications
- Created several smaller scale applications using different technologies.
 - Worked with several different Python frameworks including Django and Flask
 - Learning more about websockets and their applications with Python Flask Socket-IO
 - Used to create basic web-based multiplayer games like tic-tac-toe and battleship
 - Data mining application written in both Python and Ruby for the experience
- Manage several personal virtual servers using Digital Ocean
 - Configuring server groups for centralized monitoring and management
 - Most experience with Ubuntu distributions, but also familiar with CentOS
 - Expert with LAMP configuration, also some use of nginx and ruby
 - Using one VPS to host Minecraft and Teamspeak servers for friends and family to play games and be social
- Made an iPhone game just for fun after learning more about iOS game development
 - Very simple 2D game using SpriteKit called "Bomb Defender"

Boolal Software - Sierra Applied Science**2011 - 2013**

- Worked with a partner developing web and mobile apps, as well as mac software.
 - We published our app "PicPoc" to the Apple App Store
 - We built a Mac Application "SimplePlot" to be an easy spreadsheet and graphing/plotting replacement for Excel
- Gained experience in Objective-C, and iOS development.
- Adding on to Unix system administration experience by managing a Linode (remote server running an Ubuntu distro) to run all web apps and back-end services.
 - Rebuilt entire server

System Administrator - University of Colorado at Boulder**2009 - 2012**

- Worked in the Communication Department at CU Boulder as a System Administrator for over two years.
- Learned about Active Directory and Windows and Linux (mostly Ubuntu) server configurations.
- Configured back-end servers to provide real-time updated information.
- Developed desktop applications using C# & Objective C.
- Oversaw deployment, configuration and documentation procedures

School Projects & Coursework**2008 - 2012**

- Developed the mobile applications for Next Big Sound as my senior project
 - Worked with team of peers to transform the Next Big Sound website into a mobile web app as well as native apps for both iPhone and Android
- Worked with a partner for an independent study web app project
 - Built web forum for CU Boulder Computer Science students to help each other out with school or personal projects.
 - Hosted the site on a University server so it can be authenticated with CU credentials
 - Written in PHP using CodeIgniter as the MVC framework
 - Built custom rudimentary file sharing interface for project uploads/downloads
- Took graphics and advanced graphics classes programming in C/C++ and OpenGL
- For a list of all my courses and grades earned, please visit my website (www.charliemcclung.com)

Education

University of Colorado at Boulder**2008 - 2012**

BS from CU Boulder in Computer Science with an emphasis in Software Engineering

CS GPA: 3.425 (Overall GPA: 3.10)