# **Matt Bruzek**

mattbruzek.com mbruzek@gmail.com https://github.com/mbruzek

#### **SUMMARY**

Cloud **Software Engineer** with passion for Open Source software, Continuous Integration (CI) and building high quality software. Worked with most public clouds including Amazon (AWS), Digital Ocean, Google (GCP), and Microsoft Azure. Experienced with Linux container patterns including Docker, and a contributor to the Kubernetes project.

#### COMPUTER SKILLS

**Languages:** Python, Java, C/C++, Ansible, Bash (shell scripting)

Clouds: Amazon (AWS), Digital Ocean (DO), Google (GCP), Microsoft Azure, and OpenStack

**Containers:** Docker, Kubernetes, LXD/LXC, and OpenShift **Platforms:** Linux, Microsoft, and Apple operating systems

Processes: Agile, Automation, Build, DevOps, and Software Design

#### **EXPERIENCE**

# Red Hat Senior Software Engineer

2017 - Present

<u>Scale & Performance</u>: Designed and implemented Ansible automation to install and configure large scale OpenShift (a Kubernetes product) clusters to test and benchmark the performance of different builds on hardware platforms. Resolved problems with OpenShift Enterprise builds and components before releasing to customers.

Canonical Ltd. Software Engineer 2014 - 2017

<u>Juju Ecosystem</u>: Converting DevOps best practices to code that installs, configures, and connects software for multiple Open Source projects including Kubernetes. Created training sessions to educate community and business partners on how to write DevOps code for their software projects.

# IBM Staff Software Engineer 2004 - 2013

<u>SmartCloud Entry</u>: Led multiple teams and applied technical expertise to solve blocking issues in cloud management product.

<u>Solution for Compliance in a Regulated Environment (SCORE)</u>: Implemented new features and improved performance for a software product that enables Life Science and Healthcare companies to comply with industry regulations.

<u>IBM Systems Director</u>: Designed a new graphical interface for the IBM Systems Director J2EE product.

## IBM Software Engineer 1997 - 2004

<u>Information Center</u>: Designed, developed and maintained the search, a J2EE application featured on IBM's external web sites.

<u>Thin Client Manager</u>: Ported the Java Virtual Machine to the Solaris based operating system to enable Java applications to run on the IBM Thin Client. Worked with customers to get their feedback implemented in the graphical user interface for the IBM Thin Client Manager.

# **EDUCATION**

University of Minnesota, Duluth, MN

BS in Computer Science with cum laude honors

SANS Institute, SEC401: Security Essentials

Building the security skills to protect an organization's critical information assets and systems.

#### **ACCOMPLISHMENTS**

- Red Hat Certified System Administrator (RHCSA) valid from 2018 to 2021 <u>License 170-275-812</u>
- Co-inventor of United States Patent 7,472,115, "Contextual flyout for search results"
- Created and delivered a Linux introduction class for the Rochester Community Education Adult enrichment department and the Rochester Public Library.
- Leader of the Rochester Python Meetup group <a href="https://meetup.com/PyRochesterMN">https://meetup.com/PyRochesterMN</a>
- Board member of the <u>Rochester Active Sports Club (RASC)</u> bicycle steering committee.
- Member of the Rochester makerspace creating electronics projects with Arduino and Raspberry PIs.

# **CONFERENCE PRESENTATIONS**

- "The Evolution of the Kubernetes Model" Config Management Camp in Ghent, Belgium 2017 How the operations of Kubernetes clusters has changed over time.
- "Rolling Out and Managing Kubernetes" Config Management Camp in Ghent, Belgium 2016

  Deploy and manage production grade Kubernetes clusters on public clouds.
- "Juju Charm Testing and Debugging" Config Management Camp in Ghent, Belgium 2016 Testing, troubleshooting and debugging Juju operations code.
- "Use Nagios to Monitor Your Public Cloud" Nagios World Conference in St. Paul Minnesota 2015

  Easy ways to automatically monitor deployed applications on different public clouds.

## **PROJECTS**

## **DevOps**

- Automated large scale OpenShift (Kubernetes) clusters to enable performance tests on the enterprise product.
- Created the Canonical Distribution of Kubernetes the officially supported operations to deploy, install and configure a Kubernetes cluster on Ubuntu.
- Developed a Continuous Integration (CI) system in Jenkins to build and test the operations of the cluster and automated publishing the daily reports to the Kubernetes test grid report website.

#### **Software Engineering**

- Developed automated scripts to install and configure the complex OpenStack distributed systems, enabling SmartCloud Entry to ship a reproducible virtual appliance images.
- Led a team of engineers and testers, all from different products and teams to complete the release requirements for SmartCloud Entry version 2.3.
- Scrum master and team leader for an aglie team of software engineers that implemented key features allowing users to manage their existing VMware virtual environment.
- Planned and coordinated an education event for 30 level two customer support staff from different sites, resulting in better understanding of the product improving customer service and support.
- Updated the core code to improve performance and reliability of the entire product. Supported existing customers by prioritizing and fixing reported problems.
- Collaborated with a vendor company (ILOG) to resolve critical problems with the graphical Java Server Faces (JSF) libraries, enabling consumption by the IBM Systems Director product.
- Prioritized the resolution of functional problems by working with the Apache Software Foundation Open Source community, allowing IBM Systems Director to include the open source JSF portlet bridge.
- Supported search software with four releases of the iSeries and eServer products, each release was translated into 33 languages and contained over 30,000 documents per language.
- Created proof of concept prototypes and incorporated the Lucene open source search engine to the Information Center search Java application, improving reliability and accuracy of the search indexes.
- Enabled users of the Information Center to search PDF files by creating a Java PDF parser based on the Adobe PDF 1.4 specification.