Ryan Bak

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Technical Skills:

- **Programming Languages:** Python, Java, Go
- Other Technologies: Puppet, Ansible, OpenStack, AWS, Docker, Kubernetes, Kafka, Elasticsearch, Kibana, Redis, Postgres, Linux, Jenkins, Git

Work Experience:

Software Engineer – Cray/HPE

- Designed and developed microservices for managing HPC infrastructure.
 - o Designed and developed microservices for configuration management and boot orchestration.
 - Managed deployment of the microservices.

Software Engineer – Cloudvisory

- Developed microservices for use in a cloud security product.
 - Designed and developed microservices for use in a network flow collection pipeline.
 - Designed and developed a service using machine learning to produce recommendations.
 - Developed software to work with many cloud technologies.

Senior Engineer, OpenStack DevOps – Charter Communications

- Developed monitoring and recovery tools for a production scale cloud.
 - Developed Monasca, the OpenStack monitoring solution, for use as both an internal monitoring tool and to provide monitoring as a service.
 - 0 Deployed and tested Monasca with multiple backend databases.
 - Improved the Monasca UI, and developed Grafana integration. Developed automated recovery tools to assist in incident response.
 - Presented session on Cloud Monitoring at the 2016 OpenStack Summit in Austin.
- Contributed to open source projects including OpenStack and Grafana.
- Automated deployment of cloud infrastructure.
 - Developed a Puppet module to automate deployment of Monasca.
 - Automated the deployment of A10 load balancer configurations.

Software Developer – United States Department of Agriculture

- Developed and debugged Root Zone, a research-level crop modeling application.
- Integrated PEST, a model-independent parameter estimation software, with Root Zone.

Developed graphical user interfaces in C++ with Windows Visual Studio 2010.

Certifications:

Certified OpenStack Administrator AWS Certified Solutions Architect – Associate

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Education:

Colorado State University, Fort Collins, CO - Masters of Computer Science, May 2014 St. Olaf College, Northfield, MN - Bachelor of Arts in Physics, May 2012

March 2019 - Present

[Python, Ansible, Kafka, Redis, Postgres, Gitea] [Kubernetes, Docker, Helm]

February 2018 – March 2019

[Go, Java, Kafka, Elasticsearch, Kibana] [Python]

[Openstack, AWS, Azure]

May 2014 - February 2018

[OpenStack, Monasca]

[MongoDB, InfluxDB, Vertica]

[OpenStack, Javascript, Grafana] [Python]

[Gerrit, Jenkins]

[Puppet]

[Jenkins, Ansible, Ruby]

October 2012 - April 2014

[C++, Fortran]

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