

# Christopher Michael Kirkland

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Email : kirklandcm@gmail.com

Webpage : <http://chriskirkland.us>

**Objective** Use my background in Computer Science and Math to tackle difficult Engineering problems and produce quality software, particularly in the areas of cloud infrastructure and web services.

**Education** North Carolina State University, Raleigh, NC, 27695  
**M.S. in Applied Mathematics, Dec. 2014**

Mercer University, Macon, GA, 31207

**B.S. in Mathematics, May 2012**

**B.A. in Computer Science, May 2012**

**Work Experience** International Business Machines Sept 2017 - Current  
Advisory Software Engineer - Containers

International Business Machines Feb 2017 - Aug 2017  
Staff Software Engineer - Containers

*Worked on various backend services for IBM's Container Service based on Kubernetes. Developed and maintained critical pieces of the control plane including offering usage metrics, microservice monitoring, and customer logging and metrics support. Designed and developed a scalable solution, based on Prometheus, for monitoring services deployed on customer clusters in a Kubernetes-on-Kubernetes architecture. Worked on first-class logging and metrics solution, based on Fluentd, used to support both infrastructure and customer clusters.*

International Business Machines June 2015 - Jan 2017  
11501 Burnet Rd, Austin, TX 78758

Staff Software Engineer - Cloud Performance Engineer

*Improved the performance of IBM Cloud infrastructure and Cloud services. Focused on Open-Stack services Nova, Heat, and Keystone as well as BlueMix web services. Job responsibilities include development, maintenance, and orchestration of benchmarks; results analysis; and producing technical reports for executive consumption. Secondary responsibilities include serving as primary git master for squad and technical mentoring of new team members and interns.*

North Carolina State University August 2012 - April 2015  
2310 Stinson Dr, Raleigh, NC 27695

Mathematics Graduate Teaching Assistant

*Taught and graded for undergraduate mathematics courses including Finite Mathematics, Precalculus, Calculus I, Calculus III, and Differential Equations.*

**Conferences** KubeCon/CloudNativeCon Austin December, 2017  
OSCon Austin May, 2017  
DockerCon Austin April, 2017  
OpenStack Summit Barcelona October 27, 2016  
Accepted Presenter: *A Nova Scheduler for Public Cloud Scale*

**Technical Skills** *Languages :*  
*Expert:* Golang  
*Proficient:* Python, Bash  
*Familiar:* Ruby, Javascript

*DevOps tools :* Ansible, Fluentd, Filebeat, Prometheus, Grafana, Jenkins, Travis

**Award and Honors** Manager's Choice Award 2017 (Mgr. Brian Countryman)  
IBM Cloud Infrastructure Services "Eminence and Excellence Award" 2015