

# AARON BLYTHE

Data Scientist and Cloud Architect

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Experienced architect and leader with a track record of success looking to take on data science challenges

## **NAIC, Sr. Enterprise Business Intelligence & Data Architect: May 2018–Present**

- Lead a team of eight engineers
- Migrated applications from on-premises data center to AWS cloud
- Designed and implemented CI/CD pipelines using Gitlab
- Lead explorations into monitoring and alerting using Dynatrace SaaS, VictorOps, ELK (Elastic Search, Logstash and Kibana), AWS Lambda and many other tools
- Taught classes on Gitlab, CD/CD, and Application deployment cycles
- Connected Gitlab to EKS Kubernetes cluster to deploy applications using Helm charts
- Developed machine learning models for predicting lead indicators of insurance company insolvency
- Shipped production applications through the pipeline to the AWS EKS Kubernetes cluster
- Developed plan to migrate hundreds of applications to the cloud
- Planned, organized, and ran a Hackathon
- Started and lead a culture committee focused on intentional culture

## **New Relic, Solution Architect: August 2017–May 2018**

- Provided proof of concepts for synthetic monitoring, agent installation through Ansible, browser Javascript monitoring focused on video and many other technologies as needed
- Developed DevOps practices that are documented on New Relic's website (<https://docs.newrelic.com/docs/using-new-relic/welcome-new-relic/measure-devops-success/guide-measuring-devops-success>)
- Presented the rollout of DevOps practices to the entire sales workforce at the company
- Presented demos of New Relic functionality at companies across the country spanning many industries
- Completed full sales cycles from introduction to signing at many companies
- Delivered full- and half-day education sessions to multiple customers

## **Hearst Business Media, Sr. Automation and Systems Architect: October 2015–August 2017**

- Guided multiple Hearst companies through DevOps migrations to the AWS cloud
- Created CloudFormation templates to deploy Chef Server
- Created a company-wide reporting application that pulled data from the Pager Duty, New Relic and Chef API's using Ruby on Rails
- Developed a weekly podcast to promote discussion of the virtues of DevOps
- Taught classes to dozens of engineers across many subsidiary companies under the Hearst umbrella

## **Cerner Corporation: January 2003–October 2015**

### *Knowledge Architect, Operations Infrastructure: March 2013–October 2015*

- Managed teams leading technological change in DevOps, Big Data and Search
- Introduced and nurtured the use of configuration management using Chef throughout the entire organization
- Operationalized the use of Splunk and Zabbix for monitoring, troubleshooting and alerting throughout the company
- Designed and developed the search application for the latest generation of EMR using Solr Indexes, HBase, Hadoop, and many other big data technologies
- Designed and developed many Ruby on Rails applications for both commercial and internal use
- Developed and delivered full-day education sessions on DevOps culture and tools for the new architects
- Developed and delivered full-day education sessions on the DevOps tool chain for teams starting out on the platform
- Developed and delivered education on dealing with complexity for every new engineer (taught this content for over 8 years)
- Managed a portfolio of millions of dollars of software licenses of DevOps tools.
- Delivered regular organization-wide updates to an audience of around one thousand people

### *Sr. Software Architect, Cerner Store: March 2010–March 2015*

- Architected and managed a Ruby on Rails e-commerce site
- Developed a catalog system, an orders system, and connections to many other parts of the business
- Developed and led an overhaul of the identity management system for all Cerner non-PHI systems
- Connected website to credit card processing subsystem

### *Sr. Software Architect, Semantic Solutions: November 2011–February 2014*

- Used Apache HBase and Solr technologies to index the Electronic Medical Record (EMR)
- Managed a productive team of talented, eager, and focused engineers to collaboratively create and maintain a stack of software focused on search
- Utilized Twitter Storm for real time processing, Map Reduce for batch processing into Solr.
- The data is accessed through a stack using Java, Groovy, and Ruby. All code is deployed using Chef.

### *Quality Architect, Development Organization: January 2008–March 2010*

- Created CernerCast, a knowledge sharing application for engineers that combined functionality similar to YouTube and RailsCast
- Developed an organization-wide Root Cause Analysis program, where recent important defects were evaluated monthly to improve development processes and outcomes across 20 different teams
- Developed a Perl/CGI business intelligence site for Windows crashes
- Analyzed and created many tools for organization-wide use

*Software Architect/Engineer, PowerChart: January 2003–January 2008*

- Collaborated with a team to design and implement a major refactor of an EMR that serves roughly 20% of major hospitals in the US
- Worked on many framework enhancement projects, including but not limited to: UTC, printing, launching external applications, common context menus, patient lists, patient summary sheets, allergies

## **Education**

- MS Computer Science, Focus in Data Science – August 2020
  - University of Illinois – Urbana Champaign – 4.0 GPA
- BS Industrial Engineering – Dec 2002
  - University of Illinois – Urbana Champaign – Alpha Pi Mu Honors
- Study abroad – 2002
  - Griffith University Gold Coast Australia

## **Certifications**

- AWS Certified Developer, Associate – January 2020
- TOGAF 9.2 Certified Enterprise Architect – January 2020
- AWS Certified Solutions Architect, Associate – September 2019
- New Relic Certified Performance Pro – March 2018
- Splunk Certified Admin – October 2015

## **Skills**

- Data analysis in R and Python
- Building solid tech stack tool chains
- Public speaking
- Leadership, mentoring and coaching
- Creating flow for software delivery
- Building consensus

## **Organizations**

- Lead Organizer of DevOps KC Community and monthly meetup
- Lead Organizer and MC of DevOpsDays Kansas City Conference
- Member of Golden Key International Honour Society
- Member of Mensa
- Member of Association of Enterprise Architects

## **Accomplishments**

- 4.0 GPA at #5 computer science school in nation (<https://www.usnews.com/best-graduate-schools/top-science-schools/computer-science-rankings>)
- Selected as Cerner Masters Award for Top 1% in 2012 in first ever round at the #13 most innovative companies in the nation according to Forbes that year (<https://www.bizjournals.com/kansascity/news/2013/08/16/forbes-ranks-cerner-among-worlds-most.html>)

- Worked and lead initiatives at Cerner during the 12 years of exponential stock growth
- Graduated as part of the Industrial Engineering Honor Society from the #4 engineering school in the nation
- Lead Organizer of 4 world class technical DevOpsDays conferences and 6 year of meetups (based on Net Promoter Score of attendees ([https://en.wikipedia.org/wiki/Net\\_Promoter](https://en.wikipedia.org/wiki/Net_Promoter)))
- Presented at over 30 public conferences on topics including technology, culture, security, development, operations, and machine learning