charliemeyer

software artist, computer scientist, open source enthusiast

contact

charlie@charliemeyer.net Github LinkedIn

contact info available upon request

tongue

native english, professional spanish proficiency

objective

To obtain a full time position in the software engineering field at a dynamic high tech company.

industry experience

2022-present data.world

Principal Software Engineer

2020-2022 **DISCO** Austin, Texas

Senior Software Architect

Rolling out an enterprise communication fabric utilizing Apache Kafka and other transit technologies to reduce development time, increase velocity, and reduce costs across the DISCO platform.

Austin, Texas

Austin, Texas

2019-2020 **DISCO** Austin, Texas

Software Architect

Software Architect responsible for the DISCO document ingest pipeline. I focus the majority of my time around architecting and developing a serverless pipeline for high-speed parallel document ingest including file typing, conversion, OCR, and translation.

2017-2019 Civitas Learning

Platform Lead, Senior Staff Software Engineer

At Civitas, I was the tech lead for the data pipeline platform team. I was leading a team that was responsible for architecting and building out a next-generation streaming data pipeline in the higher education space to enable our consuming applications to be more real-time, scale efficiently, onboard new customers quicker, and reduce cloud computing costs. I was also responsible for onboarding acquisitions to the existing and next generation Civitas ETL pipelines.

In addition to understanding the technical challenges we face, I also strived to balance out our priorities based on the business value the team could deliver. This included mentoring other engineers, technical project planning and scoping, and working with product management to move the business forward.

Technologies used included the Confluent platform, Apache NiFi, Apache Atlas, Apache Spark, Spring boot, and the AWS ecosystem among many others.

2014-2017 **HomeAway**

Austin, Texas

Senior Software Engineer

At HomeAway, I was a senior software engineer and team lead for the internal tools and infrastructure team. I was previously on the core platform team which covers HomeAway's high-traffic REST API and enterprise messaging busses. I worked with technologies such as RabbitMQ, Elasticsearch, Hadoop, Kafka, Rails, and Docker among many others.

- Architected, developed, and rolled out a new internal application based on Ruby on Rails used by all engineers to accurately capture capitalizable time
- Architected and developed a distributed microservice-based JSON registry used by a variety of applications across the organization
- Led the migration to and architected new solutions on AWS for the productivity engineering organization
- Mentored the 3 Day Startup Program sponsored by HomeAway both in Austin, TX and London, UK
- Architected, developed, and open-sourced the HomeAway Ruby SDK for the HomeAway Developer API and Ruby library for communicating with Apache Storm clusters on behalf of HomeAway

2012–2014 **IBM** Austin, Texas

Staff Software Engineer

Engineer on the Cluster Aware AIX team, the backbone of the clustering capabilities of the IBM enterprise grade UNIX operating system. I led the effort to maintain, refactor, and enhance the AIX cluster communications daemon.

- Led the AIX effort to certify Oracle Real Application Clusters database on PowerHA
- Enhanced AIX clustering to scale to 32 nodes and 1024 disks per node, including parallelization of core clustering libraries
- Enabled unicast AIX cluster heartbeating
- Enabled dynamic network configuration change support across clustered systems
- Co-author of a clustering algorithm patent

2010-2012 University of Illinois at Urbana-Champaign

Urbana, Illinois

Instructor - Department of Computer Science

Taught CS528 - Object Oriented Programming and Design.

Graduate level course covering:

- Principles of object-oriented design
- Design patterns (Gang of Four)
- Use and design of frameworks
- Reflection
- Refactoring
- Use of unit tests as specifications

2010-2011 IBM Austin, Texas

Power Systems Firmware Engineer Co-op

Architected and developed an automated functional test suite composed of approximately 130 test cases for IBM Power Systems.

2008-2009 IBM Rochester, Minnesota

Power Systems Performance Co-op

Worked as a member of a team to benchmark systems, analyze performance data, develop workloads, perform maintenance on IBM Power Systems, and develop tools to aid in performance analysis.

education

2010-2012 **Master of Science** computer science University of Illinois, Urbana-Champaign

Specialization: Object oriented architecture and design

2005-2010 **Bachelor of Science** computer science University of Illinois, Urbana-Champaign

Specialization: Software Engineering, Information Assurance

publications

patents

Enhanced Mechanisms for Granting Access to Shared Resources

E. Cruz-aguilar, P. Ganesh, M. Kandasamy, C. Meyer, and S. Tovcimak

US Patent 20150089059, 03-26-2015

 $\label{local_problem} $$ URL: http://appft1.uspto.gov/netacgi/nph-Parser?Sect1=PT01&Sect2=HIT0FF&d=PG01&p=1&u=/netahtml/PT0/srchnum.html&r=1&f=G&l=50&s1=20150089059.PGNR. $$$

thesis

CoMoTo: The Collaboration Modeling Toolkit

C Meyer MS Thesis

University of Illinois at Urbana-Champaign, Aug. 2012

URL: https://www.ideals.illinois.edu/handle/2142/34353

international peer-reviewed conferences/proceedings

Programming Studio: Advances and Lessons Learned

C. Meyer and M. Woodley *ITiCSE*, 2012, Haifa, Israel

URL: http://dl.acm.org/citation.cfm?id=2325384

CoMoTo: The Collaboration Modeling Toolkit

C. Meyer, C. Heeren, J. Tedesco, and E. Shaffer

ITiCSE, 2011, Darmstadt, Germany

URL: http://dl.acm.org/citation.cfm?id=1999789

technical reports

Mocking an Integrated Clinical Environment with JavaScript

C. Meyer

University of Illinois at Urbana-Champaign, Aug. 2009

URL: https://www.ideals.illinois.edu/handle/2142/29945

JavaScript: Bringing Object-Level Security to the Browser

C. Meyer and M. Rabb

University of Illinois at Urbana-Champaign, May 2009

URL: https://www.ideals.illinois.edu/handle/2142/29944