

Akila Welihinda

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OBJECTIVE

Interested in building large distributed systems. Specifically interested in distributed compute engines and data warehousing.

EXPERIENCE

Facebook

Sep 2017 – Present

Data Infrastructure Engineer: Batch Scheduler Team

- Contributing to a batch scheduler and cluster manager that powers the Facebook data warehouse and all machine-learning training jobs, executing tens of millions of jobs per day
- Improved the container manager responsible for job execution by adding a restartability feature which improved our service's reliability by 15%
- Improved the reliability of distributed machine learning jobs by 10x by improving the retry policy and scheduling algorithm used in Chronos (Facebook's DAG scheduler)
- Added security protections to 90% of Chronos jobs by performing ownership checks during the job validation stage of the scheduling cycle

Twitter

June 2016 – Sep 2016

Software Engineering Intern: Product Data Science Team

- Improved multiple anomaly detection algorithms
- Incorporated Fast Fourier Transform into our anomaly detection suite
- Created and deployed distributed cloud services using Aurora/Mesos

Nvidia

June 2015 – Sep 2015

Software Engineering Intern

- Developed low-level C++ applications to analyze GPUs used for machine learning.
- Utilized operating system architecture concepts to enhance Nvidia native applications.

Web Graph Analysis Researcher

Sep 2014 – Sep 2015

Software Researcher

- Designed web graph algorithms to compress web nodes and edges using WDC data.
- Implemented PageRank/HITS algorithms in C++ for web graph analysis.

EDUCATION

University of California, Los Angeles

Sep 2013 – June 2017

Computer Science, Bachelor of Science, GPA: 3.8/4.0

Honors: Dean's Honors List Award (5+ times), UPE and TBP Honor Society member

SKILLS

Languages: C/C++, Java, Python, Hack, SQL

Technologies: Thrift, React, Buck, Zookeeper, Chef, Kubernetes

PROJECTS

Downcloud

- Created free & minimalistic SoundCloud downloader
- Automatically downloads entire playlists (most downloaders don't)