Arun Sai Krishnan

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EDUCATION

Carnegie Mellon University, School of Computer Science — Pittsburgh, PA
Master of Science, Computer Science — Dec 2017 (Expected)

National Institute of Technology, Tiruchirappalli — Tiruchirappalli, India
Bachelor of Technology, Computer Science and Engineering — May 2016

EXPERIENCE

Zillow | Software Engineer, Intern (Big Data) — Property Data Team
May 2017 – Aug 2017 | Seattle, WA

- Streamlined the public records property-data pipeline by implementing core business logic in Apache Spark. This effort involved moving resource-intensive data processing out of SQL databases to enhance scalability and improve performance.
- Migrated big-data workflows to AWS-EMR to leverage elasticity.

University of British Columbia | Mitacs Globalink Research Fellow — Mentor: Dr. Victor Leung
May 2015 – Aug 2015 | Vancouver, BC

- Developed SAfeDJ: a mobile-cloud based context-aware music recommendation system to promote safer driving.
- Reduced the average music mood-mapping time from 78s to 32s by eliminating computational bottlenecks through a context-aware system for offloading computation from mobile to cloud based on resource availability. [Link]
- Improved accuracy of music mood-mapping by 19% through including a driver's social-context in music mood-mapping. [Link]

Indian Institute of Technology (IIT), Ropar | Research Intern — Mentor: Dr. Junghyun Jun
May 2014 –July 2014 | Ropar, India

- Conceptualized and implemented intuitive gesture based detection and clustering of smart objects using Doppler effect.
- Successfully detected and clustered smart-objects within a 2m radius.

Teritree Technologies | Software Development Intern
(Dec 2013 – Jan 2014) & (May 2013 - July 2013) | Bangalore, India

- Conceptualized, designed and developed a data agnostic dashboard visualization framework for flexible data visualization and rapid creation of e-commerce analytics dashboards. Published in ACM SIGSOFT Software Engineering Notes. [Link]

PUBLICATIONS

- A Novel Cloud-Based Crowd Sensing Approach to Context-Aware Music Mood-Mapping for Drivers. **IEEE CloudCom** 2015.
- Towards In Time Music Mood-Mapping for Drivers: A Novel Approach. **ACM MSWiM-DIVANet Symposium** 2015.
- A Data Agnostic Dashboard Visualization Framework for e-Commerce Data Analytics. **ACM-SIGSOFT SEN** , July 2014.

PROJECTS

- Parallelizing pretraining of deep neural networks using stacked autoencoders - Spring 2017.
- Anomaly detection using dense sub-tensor sining (D-Cube algorithm) - Spring 2017.
- High throughput, low latency web service on AWS for specialized queries on Twitter data - Fall 2016.
- SmImage: Context-aware geo-tagging, indexing and querying of smartphone image galleries - Spring 2016.

COURSEWORK

GRADUATE

Parallel Comp Arch. & Programming
Distributed Systems
Cloud Computing
Machine Learning (10-601)
Multimedia Databases & Data Mining
Intro. to Computer Systems

PROGRAMMING

PROFICIENT

Java • C • C++

FAMILIAR

Python • Scala • Apache Spark
Hadoop • AWS • Big-Data
MySQL • MongoDB
Android • CUDA

AWARDS

- Mitacs Globalink Research Fellowship (2015)
- Merit scholarship - MHRD, Govt. of India (2012)
- KVPY Fellowship (2012)