Krishna Vaidyanathan

krishnarules@gmail.com

Current Position

Backend Engineer at BenchSci, Toronto.

EDUCATION

University of Waterloo, Waterloo, Canada M. Math (Thesis), Computer Science

Sep 2015 - Aug 2017

PSG College of Technology, Coimbatore, India

Jun 2010 - May 2015

Integrated M.Sc, Theoretical Computer Science

Industry Experience

Backend Engineer - BenchSci, Toronto

Sep 2017 – current

- Managed a distributed web crawler.
- Designed webpages using NodeJS and React.
- Interfacing with (and creating a few) RESTful APIs.
- Interfacing with a graph database (Neo4j).

Software Development Engineer Intern - Amazon Development Center, Chennai

Jan 2015 – July, 2015

- Developed an internal tool to static analyze codebases by generating a graph of dependencies and isolating sections of the code that is affected by check-ins.
- · Worked on Facebook's pfff tool and added features to enrichen the graph generated by pfff.
- Ported graph from pfff to TitanDB, a graph database, and wrote queries to derive insights from it.
- Code: https://github.com/krishnavaidy/pfff

RESEARCH EXPERIENCE

Research Assistant - University of Waterloo, Canada

Sep, 2015 - Aug, 2017

Supervisor: Prof. Naomi Nishimura

• Worked on reconfiguration problems in graph coloring.

PUBLICATIONS

- Krishna Vaidyanathan. "Reconfiguring Graph Colorings". MS thesis. University of Waterloo, 2017.
- Robin Cohen, Alan Tsang, Krishna Vaidyanathan, Haotian Zhang. "Analyzing Opinion Dynamics in Online Social Networks". Accepted, to appear in BigDIA (Big Data and Information Analytics).
- Jasine Babu, L. Sunil Chandran, Krishna Vaidyanathan. "Rainbow matchings in strongly edge-colored graphs". Discrete Mathematics 338.7 (2015): 1191-1196.

TECHNICAL SKILLS

Languages: Python, Javascript, C++, OCaml

Platforms : Linux, Windows

Tools : MATLAB, LATEX, Neo4j, React

EXTRA CURRICULAR ACTIVITIES

- Graduate Ambassador for the Cheriton School of Computer Science, University of Waterloo. I answered queries from prospective graduate students about course load, research areas, student life, etc.
- Completed levels N5 and N4 in the Japanese Language Proficiency Test.