

KRISHNA VAIDYANATHAN

DC 2569
University of Waterloo
200 University Avenue W, Waterloo ON N2L 3G1

kvaidyan@uwaterloo.ca
<https://cs.uwaterloo.ca/~kvaidyan>

CURRENT POSITION

Second year student of the Master of Mathematics (Thesis) program at the Cheriton School of Computer Science, University of Waterloo, Canada.

EDUCATION

University of Waterloo , Waterloo, Canada <i>M.Math (Thesis), Computer Science</i>	Sep 2015 – Aug 2017 (expected) CGPA: 90.20/100
PSG College of Technology , Coimbatore, India <i>Integrated M.Sc, Theoretical Computer Science</i>	Jun 2010 – May 2015 CGPA: 8.62/10

RESEARCH EXPERIENCE

Research Assistant - University of Waterloo, Canada Supervisor: Prof. Naomi Nishimura <ul style="list-style-type: none">Working on reconfiguration problems in graph coloring.	Sep, 2015 – present
Summer Intern - Indian Statistical Institute, Chennai, India Supervisor: Dr. Mathew C. Francis <ul style="list-style-type: none">Worked on a few problems in contact graphs of L-shapes in the plane and B_k-VPG graphs.	May, 2014 – July, 2014
Research Intern - Indian Institute of Science, Bangalore, India Supervisor: Prof. L. Sunil Chandran <ul style="list-style-type: none">Investigated rainbow matchings in the class of strongly edge-colored graphs and found a bound on the maximum rainbow matchings in terms of its minimum degree.	May, 2013 – Nov, 2014

INDUSTRY EXPERIENCE

Software Development Engineer Intern - Amazon Development Center, Chennai <ul style="list-style-type: none">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 extensively on Facebook's pfff tool and added features to enrichen the graph generated by pfff.Ported the graph from pfff to TitanDB, a graph database, and wrote queries to derive insights from it.Code: https://github.com/krishnavaidy/pfff	Jan 2015 – July, 2015
---	-----------------------

PUBLICATIONS

- 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	: OCaml, Python, C, C++
Platforms	: Linux, Windows
Tools	: MATLAB, L ^A T _E X, Coq, MySQL

AWARDS

- Recipient of the *University of Waterloo Graduate Scholarship*.
- Adjudged the *Best All Rounder* for the class of 2015 by PSG College of Technology.
- Selected for the *Indian Academy of Science Summer Research Fellowship*.

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*.