neeraj.kumar@uwaterloo.ca

Computer enthusiast with over three years of experience in building large scale software systems.

EDUCATION |

• University of Waterloo, Canada

(Fall 2013 - current)

Master of Mathematics, Computer Science Algorithms and Complexity, CGPA : 93.2%

• Indian Institute of Technology, Varanasi, India

(2006 - 2010)

Bachelors in Computer Science CGPA: 8.69/10

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Work Experience

• Research Assistant, University of Waterloo (Sep 2013 - current) Solving computationally hard problems on special graph classes.

- Google Summer of Code, Open Graph Drawing Framework (Summers 2014) Implemented algorithms for computing treewidth of undirected graphs.
- Senior Software Developer, Mentor Graphics, India (2010 Aug 2013) Algorithmic solutions for Mentor's next generation emulation platform.
- Google Summer of Code, ScummVM (Summers 2010) Wrote a game engine for testing ScummVM subsystems.
- Summer Intern, Mentor Graphics, India (Summers 2009)
 Was offered a permanent position for my contributions.
- Summer Intern, Infineon Technologies, India (Summers 2008)
 Worked on embedded linux distribution for wireless routers.

TECHNICAL SKILLS

- **Programming languages** C++(Proficient), C (Good), Perl (Good), shell-scripts (Good), php/java (basic)
- Operating systems Linux (Ubuntu)
- Programming Tools GDB (Proficient), version control (git, svn, cvs), awk, sed, etc

Other Projects

- Medley a movie search engine that combines data from Netflix, IMDB and Rotten Tomatoes.
- For an advanced operating system course, we performed a holistic analysis of shared library performance on NUMA architectures.
- Worked on implementation of TCP/IP protocol stack using design patterns for ES operating system opensource project.

Miscellaneous =

- Publication SiPTA: Signal Processing for Trace-based Anomaly Detection, at EMSOFT '14
- Scholarships Graduate Entrance Scholarship (University of Waterloo), CBSE Merit Scholarship (India)
- Teaching assistant for CS341: Algorithms and CS350: Operating Systems.