Skanda Koppula

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1.412.259.3123

Massachusetts Institute of Technology

Major: Computer Science and Engineering *Candidate for BSc, 2017*

Relevant courses: Constructive Multicore Architecture, Artificial Intelligence, Software Architecture, Design and Analysis of Algorithms, Biostatistics and Genetics, Machine Learning, Computation Structures

Projects and Work Experience

vuPoint, *a collaborative platform for text comparison* *Oct. '13, Aug. '14*

- HackMIT web project (vupoint.meteor.com) later extended to be a prototype Android app

- Implemented Latent Dirichlet and Gaussian SVMs (via OpenCV) for sentiment and keyword analysis in pairwise essay comparison

Structure-Based Statistical Modeling of Protein Interactions *May 2014 - Aug. 2014*

Informatics Intern at the Keating Lab

- Co-developed five-term frequency-analysis procedure to predict the stability of protein complexes

- Achieved $> 350\%$ speed-up via algorithmic changes (e.g. developing pre-processed libraries) and extending rate-limiting Python sections with C

- Submitting to *PLoS Computational Biology, Software*

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Awards

Faculty of Engineering Scholarship ($2,300)	2002
Ontario Graduate Scholarship (OGS) ($15,000)	2002-2003
Industrial NSERC Undergraduate Research Award ($4500)	2002
UBC OSI (Outstanding Student Initiative) Entrance Scholarship ($10,000)	1997-2002
Engineering Physics 50th Anniversary Scholarship ($600)	2001
Anne. M. Mack Scholarship ($500)	2001
NSERC Undergraduate Student Research Award ($4000)	2000
United Food and Commercial Workers Union, Local 1518 Scholarship ($1000)	1998
Top Senior Math Student Award	1997
B.C. Provincial Exam Scholarship ($1000)	1997
B.C. Government Passport to Education ($800)	1997
James Whiteside Elementary Parent Advisory Committee Award ($200)	1997

Skills

Languages: C/C++, LaTeX, Java, SPICE, MEDICI (TCAD), VHDL/VHDL-AMS, 68000 and PIC Assembly

Operating Systems: Linux (Debian), Solaris, UNIX, MacOS X, Windows 95/98/NT/2000/XP

Applications: Mathematica, MatLab, GNU Octave, LabVIEW, Cadence, LaTeX, OpenOffice, MS Office XP, OrCAD schematic capture & PCB layout, Altera MAX+PlusII VHDL FPGA Design

Lab Skils: Digital/Analog Scopes, Spectrum Analyzer, Function Generators

Fab Skills: PECVD and sputtering deposition, UV lithography, wet etch, dry etch (RIE), mask aligner, step profiler, ellipsometry, infrared spectroscopy, x-ray diffraction

Miscellaneous: software configuration management, strong verbal and written communication skills, excellent troubleshooting and debugging skills, exceptional problem solving skills, good teams skills

Interests

Academic: Solid state devices, nanotechnology, photonics, microcontrollers, RF/wireless

Sports: Playing hockey and swimming

Computers: Currently maintain two official Debian Linux packages, Mozilla beta tester, enjoy using and learning Linux systems, Building electronics projects at home, and writing JAVA software

Musical: Playing guitar and piano

Membership: Student member of IEEE since 1998, Materials Research Society member since 2002

Other: Reading novels