Mandeep Kumar

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EDUCATION

UNIVERSITY OF TORONTO
MEng in Aerospace Engineering
Expected Aug 2015 | Toronto, CA
Cum. GPA: 3.65/4.0

B.Tech in Mechanical
Engineering
May 2011 | Kurukshetra, IN
Cum. GPA: 8.82 / 10.0

JINDAL MODERN SCHOOL
Grad. April 2006 | Hisar, India

COURSEWORK

GRADUATE
Aerospace Propulsion
Advanced Fluid Mechanics
Tourbomachinery
Computer Aided Design
Measurements and Statistics
Aeroelasticity
Dynamic Response of Materials
Project Management
Sustainable Aviation

UNDERGRADUATE
Compressible Flow Thermodynamics
Mechanics and Dynamics of Machines
Power Plant Engineering
Fluid Mechanics and Dynamics
Engineering and Machine Drawing
Strength and Vibration of Materials
Steam Generation and Refrigeration
Numerical Methods and Programming

SKILLS

PROGRAMMING
Over 1000 lines:
C++ • Matlab• R Studio•LaTeX
Familiar:
C • HTML 5 •MySQL

DESIGN SOFTWARES
AutoCAD • CATIA• Solidworks

FINITE ELEMENT ANALYSIS
Ansys • Fluent

EXPERIENCE

COURSERA | KPCB Fellow + Software Engineering Intern
Expected June 2014 – Sep 2014 | Mountain View, CA
- 52 out of 2500 applicants chosen to be a KPCB Fellow 2014.

GOOGLE | Software Engineering Intern
May 2013 – Aug 2013 | Mountain View, CA
- Worked on the YouTube Captions team in primarily vanilla Javascript and Python to plan, design and develop the full stack implementation of a new framework to add and edit Automatic Speech Recognition captions.
- Created a backbone.js-like framework for the Captions editor.
- All code was reviewed, perfected, and pushed to production.

PHABRICATOR | Open Source Contributor & Team Leader
Jan 2013 – May 2013 | Palo Alto, CA & Ithaca, NY
- Phabricator is used daily by Facebook, Dropbox, Quora, Asana and more.
- I created the Meme generator, the entire Lipsum application, ported Tokens to different apps, fixed many bugs and more in PHP and Shell.
- Led a team from MIT, Cornell, IC London and UHelsinki for the project.

RESEARCH

CORNELL ROBOT LEARNING LAB | Head Undergrad Research
Jan 2014 – Present | Ithaca, NY
Worked with **Ashesh Jain** and **Prof Ashutosh Saxena** to create **PlanIt**, a tool which learns from large scale user preference feedback to plan robot trajectories in human environments. Publication submitted.

CORNELL PHONETICS LAB | Head Undergraduate Researcher
Mar 2012 – May 2013 | Ithaca, NY
Lead the development of **QuickTongue**, the first ever breakthrough tongue-controlled game with **Prof Sam Tilsen** to aid in Linguistics research. Publication submitted.

AWARDS

2014	top 52/2500	KPCB Engineering Fellow
2014	2nd most points	Google Code Jam, Qualification Round
2014	1st/50	Microsoft Coding Competition, Cornell
2013	National	Jump Trading Challenge Finalist
2013	7th/120	CS 3410 Cache Race Bot Tournament
2012	2nd/150	CS 3110 Biannual Intra-Class Bot Tournament
2011	National	Indian National Mathematics Olympiad (INMO) Finalist
2010	National	Comp. Soc. of India's National Programming Contest

SOCIETIES

2014	top 12%ile	Tau Beta Pi Engineering Honor Society
2014	National	The Global Leadership and Education Forum (tGELF)
2012	National	Golden Key International Honor Society
2012	National	National Society of Collegiate Scholars