Aviral Goel

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EDUCATION

NORTHEASTERN UNIVERSITY
MS in Computer Science
2016 - 2017 (Expected) | Boston, MA

NETAJI SUBHAS INSTITUTE OF TECHNOLOGY
B.E. in Electronics and Communication Engineering
2008 - 2012 | New Delhi, India
First Class with Distinction
Aggregate : 81.56%

DELHI PUBLIC SCHOOL, DWARKA
All India Senior School Certificate Examination (XII CBSE)
2007 - 2008 | New Delhi, India
Aggregate : 94.40%

LINKS

Github:// **aviralg**
LinkedIn:// **aviralgoel**

COURSEWORK

GRADUATE
Program Design Paradigms
Principles of Programming Languages

UNDERGRADUATE
Programming I, II, III, IV, V
Microprocessors
Computer System Organization
Digital Circuits and Systems

SKILLS

PROGRAMMING
Proficient in:
Python • C++ • C
Racket • Javascript
Good working knowledge of:
CSS • Mathematica
PHP • Matlab
Shell Scripting • Java
Haskell • MySQL

HOBBIES

Origami • Violin

EXPERIENCE

INSTITUTE FOR STEM CELL BIOLOGY AND REGENERATIVE MEDICINE, DEPARTMENT OF BIOTECHNOLOGY
Technology Manager
Feb 2015 – Dec 2015 | Bangalore, Karnataka, India
- Extended a **3D visualizer** for neuronal network simulations with more features.
- Enhanced **user experience** and **graphing** capabilities of neuronal network simulation software.

NATIONAL CENTER FOR BIOLOGICAL SCIENCES, TIFR
Programmer
Sep 2013 – Feb 2015 | Bangalore, Karnataka, India
- Designed a **3D graphics** software for visualizing electrical and chemical activity in neuronal network simulations.
- Enhanced **Graphical User Interface** for setting up neuronal network simulations and **visualizing** results.

YAHOO! SOFTWARE DEVELOPMENT INDIA PRIVATE LIMITED
Software Engineer
July 2012 – Aug 2013 | Bangalore, Karnataka, India
- Designed a **data analytics** dashboard for aggregating and visualizing product usage trends with automatic updates and reporting capabilities.
- Aggregated statistics from **big data** sets on **Hadoop** cluster using **Apache Pig**.

ROYAL BANK OF SCOTLAND | Intern
June 2011 – July 2011 | Gurgaon, Haryana, India
- Studied the design of a FIX (protocol for financial transactions) engine, Banzai, written in **Java**.

SIEMENS LIMITED | Intern
June 2010 – July 2010 | New Delhi, India
- Designed a version management software for a power plant automation and management software installed on multiple nodes in the network.

POSTERS

MODELLING MEMORY ACROSS SCALES
Annual Talks 2015 | NCBS, TIFR, Bangalore, India
Subhasis Ray, Harsha Rani, Aditya Gilra, Sahil Moza, Aviral Goel, Dilawar Singh, Upinder Bhalla

MODELLING MOLECULES TO BRAINS WITH MOOSE
Annual Talks 2014 | NCBS, TIFR, Bangalore, India
Aviral Goel, Harsha Rani, Dilawar Singh, Subhasis Ray, Niraj Dudani, Upinder Bhalla

PUBLICATIONS

[1] N. Baharadwaj, S. Wadhwa, P. Goel, I. Sethi, C. S. Arora, A. Goel, S. Bhatnagar, and H. Parthasarathy. De-noising, clustering, classification, and representation of microarray data for disease diagnostics. In R. Srivastava, S. K. Singh, and K. K. Shukla, editors, *Research Developments in Computer Vision and Image Processing: Methodologies and Applications*, chapter 9, pages 149–174. IGI Global, September 2013.