Tejas Narayan

Bioengineering | Computer Science tejasn@seas.upenn.edu | (267)-432-0829

EDUCATION

UNIVERSITY OF PENNSYLVANIA
BSE, Computer Science and Bioengineering
Magna Cum Laude
School of Engineering and Applied Science
Cum. GPA: 3.64 / 4.0

INDUS INTERNATIONAL SCHOOL
Grad. May 2012 | Bangalore, India
IB Diploma, ICE Certificate(Distinction)

HONORS

Dean's List 2015-2016
Bioengineering Senior Design Award

SKILLS

PROGRAMMING
Very Comfortable:
Java • C# • MatLab • C++/CLI • R
Proficient:
Javascript (NodeJS) • C++ • LaTeX • SQL
Some knowledge:
Android • Azure • ReactJS • Meteor

MATHEMATICAL
Differential Equations • Statistics •
Discrete Math • Multivariate Calculus

OTHER
Languages:
English (Fluent) • Kannada (working) •
French (limited)
Interests:
Raas • Soccer • Muay Thai

COURSEWORK

COMPUTER SCIENCE
Operating Systems
Databases and Information Systems
Algorithms and Data Structures
Computer Architecture

BIOENGINEERING
Image Analysis
Signal Processing
Fluid Dynamics and Themodynamics
Biomechanics and Biomaterials

LINKS

Github:// tejasnarayan
LinkedIn:// tejas-narayan

EXPERIENCE

APPLIED PREDICTIVE TECHNOLOGIES | Software Engineering Intern
May 2015 – July 2015 | Arlington, VA

- Worked as part of the Rollout Modeling team, doing full stack development including C#, R, Javascript and SQL
- Used Machine Learning in R to model and predict the runtime of other models
- Created SQL algorithms to support new calculations on large datasets
- Built a prototype of a settings optimizer for predictive models of performance

NATIONAL INSTITUTES OF HEALTH | Summer Research Fellow
May 2014 – July 2014 | Bethesda, MD

- Taught new users including graduate students and professional researchers how to use **Simmune**, the software developed by our lab led by **Dr. Martin Meier-Schellersheim**. Helped to test and evaluate the software.
- Constructed a biologically correct model of Toll Like Receptor 4 activation for use in further research
- Utilized the SimAnalyzer to understand different signaling topologies and stimulation effects and to analyze the data using R

UW HARBORVIEW MEDICAL CENTER | Undergrad Research Assistant
May 2013 – Aug 2013 | Seattle, WA

- Developed an agent based model in C++ and MATLAB to mathematically model bone growth in mice under stress, with **Dr. Sundar Srinivasan**
- Used optimization algorithms such as Simulated Annealing with statistical analysis to match in vivo data.
- Reparametrized the mathematical model to better fit in vivo data in two different ways and statistically compared the results

OTHER PROJECTS

Name	Aim	Te
OpenDose	Medical compliance in developing areas	Az
DBT Device	Improve resolution of Breast Cancer screening	C,
Homeless microphilanthropy in Phila.	Android, Java	
BMES Website	Increase use by Bioengineering students	W

EXTRA-CURRICULAR EXPERIENCE

INTRO. TO COMPUTER SCIENCE (CIS110) | Teaching Assistant
Aug 2014 – Present | Philadelphia, PA
Teach recitation and office hours, grade coursework, and help plan course

PENN RAAS | Social Chair & Active Dancer
Feb 2014 – Present | Philadelphia, PA

BIOMEDICAL ENGINEERING SOCIETY | VP of Technology
Sept 2013 - Present | Philadelphia, PA

ILMUNC INDIA 2013 | Business Director & DISEC Chair
Nov 2012 – Oct 2013 | Philadelphia, PA & New Delhi, India
Co-founded and organized a conference for over 350 students from India, requiring coordination with groups of people on opposite sides of the world. Organized outreach, media and marketing efforts. Chaired a committee of 100 student and ran a team of students.