Pranav Lakshminarayanan

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Department of Biomedical Engineering

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EXPERIENCE

Multi-faceted and hardworking individual with leadership and teamwork experience.

Experience in programming and computing in Java, Python, Matlab, and R, including data analysis, implementation, testing, and comparison of efficient data structures (such as hash tables and AVL trees) and the design of GUIs.

Experience in laboratory and research settings with knowledge of use of laboratory equipment for electronics design and testing.

EDUCATION

2012 – Present	Johns Hopkins University	2008 – 2012	Mt. Hebron High School
	Major in Biomedical Engineering		*Ellicott City, MD*
	Concentrated in Biomedical Instrumentation		*Graduated #2 in a class of 311*
	Current GPA: 3.50		*Weighted / Unweighted GPA: 4.84 / 4.00*

RELEVANT COURSEWORK

Spring 2014	**Fall 2013**	**Spring 2013**
Biomedical Models and Simulations	Data Structures	Advanced Writing and Speaking in French
Biomedical Systems, Signals, and Controls	Differential Equations	Probability and Statistics in Biological Sciences and Engineering
Electronics and Instrumentation	Molecules and Cells	Scientific Computing in BME with Matlab, Python, and R

RESEARCH AND INTERNSHIPS

Fall 2013 – Present   Center for Imaging Science, JHU
  Designed functions for CAWorks visualization software, including interaction of surfaces and MRI images
  Providing support to other researchers and users using CAWorks software

Summer 2013   St. Agnes Hospital, Baltimore, MD
  Shadowed physicians, technicians, and surgeons throughout the hospital
  Observed the use of biomedical technologies in diagnostics, care planning, and treatment

July 2010   Dr. Kamakshi Memorial Hospital, Chennai, India
  Shadowed physicians in various medical disciplines
  Learned about the use of medical technologies by witnessing their use in a real medical setting

PROJECT EXPERIENCE

Spring 2014   Electronics and Instrumentation Lab
  Design complex circuits for implementation in electronic devices for signal analysis

Fall 2013   UNIX File System Simulation (Java)
  Simulate tree structure of a UNIX file system including changing directories, and creating and removing files and directories

Spring 2013   Classification of Heart Cells by Electrophysiological Properties (Python and R)
  Plot action potentials of heart cells and find best classifiers, taking into account properties such as class imbalance and overfitting

EMPLOYMENT

Spring 2014   Teaching Assistant for Scientific Computing in BME with Matlab, Python, and R Course
  Held weekly office hours to reinforce teaching of course material
  Graded assignments and exams throughout the semester

2011 – 2012   Instructor at Kumon Learning Center
  Taught elementary to high school age children math and reading skills

LEADERSHIP POSITIONS

2010 – 2012   Executive Board Member of National Honor Society
  Volunteer over 40 hours per school year at events in Ellicott City, MD to help improve the local community
  Communicated with local organizations to create a network of volunteer services based out of the school
  Manage hours log and website for the National Honor Society, to bring new opportunities for members