Pranav Lakshminarayanan
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Johns Hopkins University
Department of Biomedical Engineering

EXPERIENCE

Multi-faceted and hardworking individual with leadership and teamwork experience.
Proficiency in programming and computing in Java, Python, Matlab, and R, including scientific visualization, data analysis, design of efficient data structures, and design of GUIs.
Experience in laboratory and research settings with knowledge of use of laboratory equipment for electronics design and testing.

EDUCATION

2012 – Dec 2015 Johns Hopkins University
Major in Biomedical Engineering
Concentrated in Biomedical Instrumentation
Current GPA: 3.49

2008 – 2012 Mt. Hebron High School
Ellicott City, MD
Graduated #2 in a class of 311
Weighted / Unweighted GPA: 4.84 / 4.00

RELEVANT COURSEWORK

Fall 2014	**Spring 2014**	**Fall 2013**
Computer Integrated Surgery	Biomedical Models and Simulations	Data Structures
Medical Imaging Systems	Biomedical Systems, Signals, and Controls	Differential Equations
Systems Bioengineering I	Electronics and Instrumentation	Molecules and Cells

RESEARCH AND INTERNSHIPS

Sept 2014 – Present Laboratory for Computational Sensing and Robotics, Johns Hopkins University
Designing Wearable Intelligent Navigation System for Surgery (WINSS)
Device is intended to track surgical tools and show areas of interest in wearable head mounted device

Sept 2013 – Aug 2014 Center for Imaging Science, Johns Hopkins University
Designed functions for CAWorks visualization software, including interaction with surfaces and MRI images
Provided support to other researchers and users using CAWorks software and communicated with developers at Kitware Inc.

June – Aug 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 medical setting

PROJECT EXPERIENCE

Fall 2014 Calibration and Registration Algorithm (Java)
Wrote algorithms for point cloud-to-point cloud transformations and pivot calibration of tracked pointer tools

Spring – Fall 2014 Development of modules for CAWorks Visualization Software (C++)
Wrote functions for surface-image interaction and image overlay, and fixing of existing bugs

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

TEACHING EXPERIENCE

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, Mt. Hebron High School
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