Tushar Pankaj

tushar.s.pankaj@gmail.com | 858.212.9947

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

BS in Electrical Engineering and Computer Sciences
Expected May 2019 | Berkeley, CA
Conc. in Computer Science and Engineering
College of Engineering
Cum. GPA: 3.73 / 4.0
Technical GPA: 4.0 / 4.0
Junior Standing

WESTVIEW HIGH SCHOOL

Grad. Jun 2015 | San Diego, CA
Cum. GPA: 4.38 / 4.0 (weighted)
Honor Roll (All Quarters)

LINKS

Github **https://github.com/tpankaj**
LinkedIn **https://linkedin.com/in/tpankaj**

COURSEWORK

UNDERGRADUATE

Structure and Interpretation of Computer Programs
Designing Information Devices and Systems I
Circuits and Electronics (edX)
Machine Learning (Coursera)
Multivariable Calculus
Vector Calculus
Linear Algebra
Differential Equations
Electricity & Magnetism

SKILLS

PROGRAMMING

Proficient:
C++ • Java • Python • HTML • LaTeX
Skilled:
CSS • PHP • Bash
Familiar:
Android • JavaScript • MATLAB
MySQL

TOOLS

Proficient:
Git • Linux
Familiar:
Subversion • Mercurial

EXPERIENCE

KEEVIO, INC. | Research Engineer Intern

Jun 2015–Jan 2016 | San Diego, CA

- Designed and implemented a logging system for usage patterns of a music recommendation system
- Designed, developed, and tested systems for automatic key estimation of a song from the audio signal, using signal processing and machine learning

PROJECTS

SAN DIEGO ROBOTICS 101 | Software Engineer

Oct 2013–Jul 2015 | San Diego, CA

- Co-founded a team of high school students for the RoboSub competition
- Designed, developed, and tested computer vision-based targeting software for autonomous control
- Designed, implemented, and tested custom two-way UDP-based protocol to communicate with a Xilinx Microzed board

WESTVIEW ROBOTICS TEAM | Computer Vision Project Manager

Jan 2012–Jun 2015 | San Diego, CA

- Designed, developed, and tested computer vision-based targeting and autonomous shooter control software
- Designed, developed, and taught a 10-week course on C++, Linux, Raspberry Pi, and OpenCV to a group of high school students

NOISEMES RESEARCH PROJECT, UC SAN DIEGO

Jun 2014–Aug 2014 | San Diego, CA

- Ran experiments to classify YouTube videos based on their audio tracks using machine learning algorithms on noisemes
- 40% accuracy (F1 score), with details at **http://tspankaj.com/pub/noisemes.pdf**
- Advisors: **Prof. Gert Lanckriet**, **Dr. Emanuele Coviello**

WESTVIEW KEY CLUB | Webmaster

Nov 2013–Jun 2015 | San Diego, CA

- Designed and implemented a database-driven **website** to track community service events and hours for 250 users
- Set up and administered Apache on a virtual private server with a domain name

AWARDS

2014 Top 30/600 GPAs, Fraternity of Academic and Civic Excellence
2013 Software Specialist, Westview Robotics, Mentor-awarded
2012 Innovator of the Year, Westview Robotics, Mentor-awarded
2010 San Diego County Board of Supervisors Certificate of Appreciation
2010 1st place/50, FIRST Tech Challenge, San Diego Regional Competition

EXTRACURRICULARS

2014–2015	Vice President of Technology	Nuptse Foundation
2012–2015	Webmaster	Westview Key Club
2012–2013	Founder and President	Westview Programming Club
2011–2015	Computer Vision Project Manager	Westview Robotics Team