Shubham Suneja

http://shubhamsuneja.me
2014eeb1075@iitrpr.ac.in | +91 964.645.4979

EDUCATION

IIT ROPAR
BTech in Electrical and Electronics Engineering
Expected Dec 2018 | Punjab, India
Cum. GPA: 6.45/10.0

SCHOLARS HOME
Higher Secondary
May 2013 | Dehradun, India
86.4 / 100

Secondary
May 2011 | Dehradun, India
9.2 / 10.0

LINKS

Github:// **sunejax**
LinkedIn:// **shubhamsuneja**
Twitter:// **@sunejax**

SKILLS

PROGRAMMING
Advanced:
C++ • C • Python • PHP • Matlab
HTML • CSS • JavaScript • LaTeX
Moderate:
MySQL• PostgreSQL • Assembly
Embedded C • TMS C • ColdFusion• Go
Familiar:
AS3 • iOS • Rails • Android

LANGUAGES - CEFRL
English
Professional Proficiency
Hindi
Native Language
Japanese
Intermediate

EXPERIENCE

AUTOMATION | TATA Automation Limited | Summer Intern
May 2017 – July 2017

- Developed a Product Recognition System using Multi-Scale Colour Features, Hierarchical Models and Particle Filtering
- Used colour feature detection in combination with qualitative hierarchical models for representing the product.
- Particle filtering with hierarchical sampling for tracking.
- Worked with Raspberry Pi • Shell • Python • Watchdog • TRIO BASIC

SELF BALANCING BOT | IIT Ropar | Summer Intern
May 2016 – Sept 2016

- Developed a Bot that can balance itself on two wheels.
- Worked with the Digital Motion Processor (of MPU6050 - the IMU) as well as a Kalman Filter for sensor fusion to benchmark computational efficiency.
- Employed PID Feedback control method.

PROJECTS

DEGREE PROJECT | Actively compensating Exoskeleton | APATH
Present | projects.shubhamsuneja.me

- **A** ffordable **P** reventative and **A** ssistive **T** echnology for **H** ealthcare. Developing an affordable active exoskeleton mechanism in collaboration with **InnotecUK, TWI.**
- Collecting human motion data through Microsoft Kinect, IMU's and EMG sensors to record and then employ a CNN to extract necessary features with an end goal to predict **intent** of motion.

ADOBE | Portfolio Maker WebApp | Coldfusion Challenge
Dec 2016 | Winner | stu_man_con

- Developed a WebApp where users can enter their information and choose from multiple templates to create a portfolio website.
- Worked with Coldfusion • PostgreSQL • HTML5 • Vanilla JS • CSS3 • AWS Heroku

MINDSUMO | Club Recommendation Web App
July 2016 | Winner | recom

- Developed a club recommendation WebApp which uses KNN and KdTree optimized KNN to generate recommendations.
- Worked with PHP • PostgreSQL • HTML5 • Vanilla JS • CSS3 • AWS • Heroku

AUTODESK | VR 3D Model Viewer
May 2016 | Winner | vriewer

- Made a side-by-side HTML5 Motion Event Synchronised 3D Viewer for Google Cardboard in which a user can upload and view any 3D model. Using Autodesk View and Data API
- Worked with PHP • PostgreSQL • HTML5 • Vanilla JS • CSS3 • REST API OAuth2 • AWS • Heroku

COURSES

UNDERGRADUATE

Embedded Systems
Control Systems
Data Structures

ONLINE COURSES

Algorithms
Machine Learning

ACHIEVEMENTS

2016	top 70/1500	ACM ICPC Regionals Kharagpur
2015	Champion	InterIIT Techmeet
2015	$1^{st}/50$	IEEE Design Competion
2014	AIR 3754	IIT JEE Advance
2014	Percentile 99.91	IIT JEE MAIN

SOCIETIES

2016	Chief Editor	Kshitij The College Magazine
2015	Executive Member	Robotics Society
2015	Editor	Kshitij The College Magazine