Abhinuv Pitale

Interested in building the tech of tomorrow!

San Jose, 95134 linkedin.com/in/abhinuvpitale
abhinuv@vt.edu | (540)-449-7919 abhinuv.dev

Objective

Seeking exciting full time firmware/software engineering roles.

Education

Master of Engineering in Computer Engineering, Virginia Tech **May'19**
GPA: 3.9/4

B. Engineering in Electronics & Telecommunication, University of Pune **May'16**
Awarded Consistently High Academic Performance (C.H.A.P) Award

Skills

Languages : Python, C, MATLAB
Tools : Git, Jira, Travis, ros, Tensorflow, Pytorch, Docker, GNU Radio, CANoe,CANape, Vector tools

Work Experience

Cora / Wisk Aero, Mountain View (Embedded Software Engineer) **Jul'19 - Present**
- Core contributor in implementing a triple redundant, single fault tolerant flight software (STM32)
- Designing and proving test cases in Hardware in Loop Testing to provide flight worthy releases
- Tool development for defining avionics interfaces

Kitty Hawk Corporation, Mountain View (Software and Controls Intern) **Aug'18 - Nov'18**
- Bringup, integration and testing of novel aviation sensor solutions for an autonomous electric aircraft
- Defined and validated requirements against aviation standards for certification (DO-178B)

DeepSig Inc., Arlington (Machine Learning Intern) **May'18 - Aug'18**
- Designed and implemented wireless channel synchronization using GNU Radio
- Modelled properties of a wireless channel using deep learning

Neural Dynamics Lab, Virginia Tech, Blacksburg (Student Researcher) **Nov'17 - May'18**
- Interfacing of EEG and ECoG based Brain Machine Interfaces
- Studying and implementing various deep learning architectures for classification in BMI

Mercedes Benz R&D, India (Software Engineer) **Aug'16 - Jul'17**
- Design and Simulation of an autonomous lane shift algorithm
- Tool automation for calibration of Emission data over CAN to reduce job time on a HiL by 90%

Defense Research & Development Organisation, India (Student Researcher) **Jun'15 - May'16**
- Modeling for Simultaneous Localization and Mapping (SLAM) for inertial navigation system

San Telequip Pvt. Ltd., India (Intern) **Jun'14 - Nov'14**
- Prototyping a wireless doorbell and setup its client-server interaction over an Apache server

Projects

HoldOn - Remote Prosthetic Arm
- Design and prototyping of a prosthetic arm to mimic the gesture of holding hands, remotely.

Pong using BMI interfacing EEG
- Using Mu rhythms, created a Pong game for learning to use EEG datasets using open source tools

Pathfinder - Minimalist Bicyclist Navigation device
- Small, Low Power, Intuitive Navigation aid using arduino, IMU, LEDs and Android!

FingerSpeller - American Sign Language using DL/ML
- Real-time gesture recognition using Deep Learning as well as feature based image processing

Cyber Security Data Analysis
- Word Clouds, Clustering, Model Creation for evidence of malware, keylogging and suspicious behavior

Data Driven Astronomy
- K-d trees for cross referencing galaxies across datasets and CART tree models for galaxy classification

Robocon 2014 - 2nd Runner Up
- 6DOF semi-autonomous robot created for a national level robotics competition

Freescale Cup - 4th Place
- PID controlled racing model car, using a CCD camera for track detection