Shubham Mahalank

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EDUCATION

NEW YORK UNIVERSITY | MS in Computer Engineering
Sep 2017 - Expected May 2019 | New York NY, USA • GPA: 3.07/4.0

BVB COLLEGE OF ENGINEERING AND TECHNOLOGY | BE in Electronics and Communication
Sep 2012 - May 2016 | Hubli KA, India • GPA: 3.9/4.0

Coursework: Advanced Hardware Design, Computing Systems Architecture, Sensor Based Robotics, Real-Time Embedded Systems, Digital Signal Processing (Image & Video), Internet of Things, Data Structures & Algorithms, Systems Engineering

EXPERIENCE

KPIT TECHNOLOGIES | Software Engineer Intern
Jun 2018 - Aug 2018 | Bangalore KA, India

- Designed and demonstrated electromagnetic regenerative suspension system to control Engine of an Automobile
- Languages and Tools used: Embedded C, Raspberry Pi, Pressure Sensors

NEW YORK UNIVERSITY, DIVISION OF LIBRARIES | IT Lead Graduate Student Assistant
Feb 2018 - May 2018 | New York NY, USA

- Worked in a team of 6 developing a project that senses the presence of people sitting on desks in a library using SONAR
- Writing Linux Shell scripts for task automation, scheduling, and deployment of programs for multiple machines

SNAPTRUDE | Software Engineer
Aug 2016 - Jul 2017 | Bangalore KA, India

- Designed and implemented a 3-D mapping of interior of buildings using image processing techniques
- Built a remote controlled UAV i.e., Quadcopter mounted with camera to record a 3-D map of building
- Tools and Languages used: Python, MATLAB, OpenCV, Camera for mapping, Ultrasonic Sensors

PROJECTS

COMPUTER ENGINEERING DEPARTMENT, NYU | Course Project
Sep 2017 – Dec 2017 | New York NY, USA

- Designed and deployed MIPS Architecture including Caches on Nexys FPGA Board using C++ and VHDL
- Further implemented RC5 Encryption-Decryption on the designed processor on FPGA in Assembly Language

EMBEDDED SYSTEMS LAB, KLE TECHNOLOGICAL UNIVERSITY | Research Assistant
Jun 2015 – May 2016 | Hubli KA, India

- Worked with Prof. R.M.Banakar on designing real-time smart traffic management system to detect traffic in urban areas
- Designed and implemented an algorithm in real-time scenario to control traffic lights based on traffic density

MICROSOFT IOT LAB, KLE TECHNOLOGICAL UNIVERSITY | Capstone Project
Feb 2015 – May 2016 | Hubli KA, India

- Designed an IoT based Android Application for Home Automation and Security
- Worked on Embedded Systems, Internet of Things, Android App Development, Machine Learning

SKILLSET

LANGUAGES
C/C++ • Embedded C • Python • ARM Assembly • MATLAB • VHDL & Verilog • JAVA (Beginner)

TOOLS AND FRAMEWORKS
XILINX • Keil - uVision • OpenCV • NumPy & SciPy• ARM Cortex M4 • Arduino • Android Studio (Beginner)

OPERATING SYSTEMS
Linux / Ubuntu • MacOS • Windows