# Saket Mahajan

smahajan@scu.edu | (+1) 6692147219

## EDUCATION

**SANTA CLARA UNIVERSITY**
MS in Computer Science and Engineering
Expected June 2020 | Santa Clara, CA

## EDUCATION

**VELLORE INSTITUTE OF TECHNOLOGY (VIT)**
B.Tech. in Computer Science and Engineering (CSE)
Graduated Sept 2018 | Vellore, India

## COURSEWORK

Design Analysis and Algorithms
Operating Systems
Embedded Systems
Computer Networks
Agent-Based Intelligence System
Computer Architecture and Organization
Software Engineering
Database Systems
Mobile Computing
Image vision and Computing
Green Computing

## SKILLS

**PROGRAMMING**
C • C++ • C#
MATLAB • Python • Shell
CSS • HTML5 • PHP • JavaScript
MySQL • Android • R • LATEX

**DEVICES**
Raspberry Pi • BeagleBone Black
Arduino UNO • Arduino MEGA
Arduino Pro Mini• NodeMCU

## SOCIETIES

2014 Gravitas Tech Fest Coordinator
2015 SAP student ambassador
2015 AIESEC
2016 Yuva Marathi

## NON-ACADEMIC

2017 Sales and Marketing Head at Yuva Marathi
2015 Corporate Finance Intern at AIESEC Mauritius

## PROJECTS

**DESIGNING AN EFFICIENT WIRELESS SENSOR NETWORKS** | Project at VIT
Dec 2017 – May 2018 | Vellore, India

- The project aimed at designing efficient Wireless Sensor Networks on the likes of discovering the shortest path and critical node monitoring
- Implemented the Shortest Path Routing Algorithm for finding the shortest path
- Implemented the Ant Colony Optimization for identification of critical nodes
- Merged both the algorithms to design an efficient Wireless Sensor Networks

**VIT CLOUD COMPUTING LAB** | Research Assistant at VIT
Jul 2017 – Dec 2017 | Vellore, India

- Implemented the Grey Wolf Optimizer (GWO) algorithm for minimizing energy consumption in wireless sensor networks
- Experimented and showed that GWO minimized energy consumption by 17% and 12% when compared with PSO and FA algorithms respectively

**SMART BED FOR HOSPITALS** | Team Project at VIT
Jan 2017 – May 2017 | Vellore, India

- Designed a Smart Bed for Hospitals for monitoring patients
- Used BeagleBone Black to design the Smart Bed for Hospitals
- Reduced Smart Bed costs by 60% by using an event trigger approach for power consumption.

**MOBILE AND GREEN COMPUTING** | Research Assistant at VIT
Sept 2017 – May 2018 | Vellore, India

- Developed an algorithm to minimized database transaction costs using Ant-Colony Optimization (ACO) and Google API
- Modeled SQL queries as individual nodes as an input to ACO
- ACO's output was the optimal order in which the SQL queries should be executed
- Implemented an algorithm to compute optimal path using ACO for delivery network minimizing the time taken and fuel consumption

**SECURE REAL-TIME VEHICLE TRACKING** | Team Project at VIT
Jul 2016 – Dec 2016 | Vellore, India

- Designed a cloud application in IBM Bluemix for secure real-time vehicle GPS data transfer from vehicle to the monitoring system hosted in the cloud
- Designed an Android mobile application to record and transmit data to IBM Bluemix

## EXPERIENCE

**HIOTRON** | Embedded Engineering Intern
May 2017 – July 2017 | Pune, India

- Designed an application for real-time data monitoring from Electric-Power Meter and Smart Locks
- Created a multi-purpose library by integrating libraries from Arduino UNO, Arduino MEGA, NodeMCU
- Tested the library execution on all the platforms in home automation applications