Cincinnati, OH
(571) 789-8828
utsavshah507@gmail.com

Utsav Shah

GitHub
LinkedIn
Pronounced as UT-sav SHA

Education:

Master of Engineering, Electrical Engineering – University of Cincinnati, GPA: 3.67/4.00 **Expected Dec. 2017**
Bachelor of Technology, Electronics and Telecommunication – NMIMS University, First Class Hon. **Aug. 2016**
Diploma, Entrepreneurship Management – Welingkar Institute of Management Development & Research **Jan. 2014**

Technical Skills:

Advanced	Python, MATLAB/Simulink, SQL, LaTeX, Regular Expressions, Microsoft Office (Excel, Word, Outlook).
Intermediate	Java, Git, CMD, 8086, 8051, 8952, ATmega64, Raspberry Pi, AutoCAD, SolidWorks, Jira, Pelican, SciKit.
Basic	C, C++, Groovy, RubyMine, Jenkins, Raspberry Pi.

Work Experience:

Development Intern – Datical, Austin, TX **Jun. 2017 – Sep. 2017**

- Writing drool files (Business Rules Engine) and technical documentation for client specific rules.
- Using Datical DB to deploy the SQL scripts to various RDBMS platforms using Git for version control and Jenkins for deployments in an Agile environment.

Summer Intern – Enviro Analysts and Engineers, Mumbai **Apr. 2016 – Jul. 2016**

- Environmental Impact Assessment on clientele data to provide economically feasible solutions and data wrangling.

Research and Development Intern – Shalimar Hardware, Mumbai **May 2015 – Jul. 2015**

- Researched electronically controlled handles and locks mainly using RFID chips and scanners.

Embedded Systems Intern – ThinkLabs, IIT Bombay **May 2013 – Jun. 2013**

- Resistive Touch Screen Controlled Bot: Interfaced an 8-bit ATmega64 to two DC motors and soldered the resistive touch screen to it. Direction and speed was controlled from the screen according to real-time coordinates.

Projects:

Design of Neural Network – Implemented feed-forward and back-propagation algorithm and built a neural network to learn and grow with its weights auto-updated with every epoch using MNIST dataset.

Finding Maximum Clique based on Ant Colony Optimization(ACO) – Created an online social network that finds the maximum clique by self-learning and growth using ACO and Preferential Attachment.

Design of Single-Axis Solar Tracker – Interfaced and designed PID Controller to DC Motor to track the sun to gain maximum solar radiation on MATLAB and Simulink.

Fuzzy Logic in an Image Processing System – Modified membership functions for Intensity Transformation and Spatial Filtering algorithms to increase grey-level distribution in an image by 15% using Fuzzy Logic techniques.

Robotic Vehicle Operated by a TV Remote – Interfaced an IR sensor to 8051 microcontroller for sensing IR signals transmitted by the TV remote to operate robotic vehicle.

Wireless Remote Controlled Car – Etched a PCB and designed a motor to run from the phone using a Bluetooth module mounted on the board.

Music Taste Prediction – Performed an analysis of the recommender system algorithms, studied supervised learning and deep learning, discretized Million Song Dataset (MSD) to be able to efficiently obtain results using Python.

Leadership, Volunteer, and Other Experience:

- **Test Center Administrator –** University of Cincinnati
- **Associate Collaborator –** HackerX Cincinnati
- **President –** IETE
- **Content Writer –** Housing.com
- **Treasurer –** Model United Nations Society
- **Community Service –** Ahimsa
- **Head of Department –** IEEE

Relevant Courses:

Intelligent Systems, Complex Systems and Networks, Quality Control, Linear Systems Theory, Probability and Random Processes, Digital Image Processing, Modern Control, Effectiveness in Technical Organizations, Speech Processing, Digital Signal Processing, TV and Video Engineering, Micro-controllers & Embedded Systems, RF Circuit Design, Analog Integrated Circuits and Applications, Computer Communication Networks, Satellite Communication and Radar, Antenna and Wave Propagation, Principles of Management, Financial Management, World Class Manufacturing.