

DEVAJ PARIKH

Fullerton, CA 92831 | +1 (714) 872 6916 | devajparikh.1995@gmail.com
<https://www.linkedin.com/in/devaj-parikh-791b6279/>

PROFESSIONAL SUMMARY

Dynamic Software Engineer offering a combination of advanced technical acumen, 2+ years of IT experience in working on both front-end and back-end features. Result-driven, hands-on work experience in software application development (Python, C, C++), Object-Oriented Design and Design Patterns, Source code version control (Git, SVN), Linux and Windows environments, Proficiency with Unit Test, Test-Driven Development (TDD), Strong programming, and excellent problem-solving skills.

CORE COMPETENCIES

- Cloud Based Computing
- Web & Messaging Services
- Internet of Things
- Team Work and Troubleshooting
- Automated Testing
- Collaborative and Organizational Skills
- Quality Assurance
- Verbal and Written Communication
- Problem Solving
- Technical Documentation
- Research and Analysis
- Software Development Lifecycle (SDLC)

PROFESSIONAL WORK EXPERIENCE

California State University, Fullerton, USA
Student Research Assistant

November 4, 2019 – January 4, 2021

- Developed a BCI controlled automobile braking system capable of reducing the braking time by 40%.
 - Processed EEG signals using FFT and signal processing windows on a real-time EEG signal.
 - Maintained the system accuracy of 100%.
- Developed an EEG based 3-Dimensional Drone control
 - Created a hybrid model of SSVEP and MI based BCI paradigms.
 - Effectively increased the accuracy of the system by 60%.
 - Reduced the processing time by 25%.
- Developed Robotic Arm for Blind Veterans
 - Developed NLP controlled real-time object recognition and a classification framework.
 - Used OpenCV and YOLOv4 based object recognition system.
 - Developed the 4 axis robotic-arm with an accuracy of 0.1°.

eInfochips Pvt. Ltd., Ahmedabad, INDIA
Project Trainee

August, 2017 to July, 2018

- Developed an Automated Testing system to verify Functionalities of an EV Supply Equipment
 - Created a scalable PyTest Framework triggered via shell script on Jenkins.
 - Created an OCPP server for testing the web based commands.
 - Developed a car simulator on STM general purpose board .
- Developed a modular metering solution for energy monitoring
 - Performed data analysis and created an IoT based sub billing applications on the module.
 - Developed system to analyse the power consumption
 - Implemented safety plugs for over and under power regulation.

Rexroth (Bosch) Group India Limited, Sanand, INDIA
Trainee

June 2, 2014 to June 30, 2014

- For the first two weeks I worked with the product service team to service DC Motor Drives.
- For the last two weeks I worked with the factory maintenance team to service different factory machinery.

EDUCATION

Masters of Science (Computer Engineering)
California State University, Fullerton, CA, USA
August 2018 – Dec 2020
GPA: 3.27

Bachelors of Technology (Electronics and Communication Engineering)
Charotar University of Science and Technology, Anand, INDIA
July 2013 – May 2017
GPA: 3.29

TECHNICAL SKILLS

OS: Linux (Ubuntu, Debian) , Windows (XP, 2007, 2010)
Languages: Python, C, C++, Embedded C, Java
IoT Platform: IBM Watson IoT, Kaa IoT
IoT Gateway: RaspberryPi, Marvell, Ra-Link, and POSIX
Messaging Framework: SQS, SNS
Frameworks: Jenkins
Communication Protocol: SPI, I2C, Web Socket, Bluetooth, Zigbee
Version Control: GIT, SVN
Hardware: 8051, 8085, Arduino, Raspberry Pi, STM.
Suite Softwares: MS Word, MS Excel, MS PowerPoint

MAJOR PROJECTS

- An IoT based Smart Mirror, which identifies the person through face recognition, pulls up the daily calendar, personalized news, local weather and more customizable widgets. It is a RaspberryPi based face detection system working on OpenCV. The widgets work on the java based architecture. (Summer 2019)
- An IoT based construction tracking system, where the products from the manufacturing company are tracked to the date they are used in construction. It also keeps a database of the materials used and the structural plans in one place so that repair or remodelling becomes easy. The project functions on various RFID tags. (Fall 2018 - Spring 2019)
- A university funded project of Autonomous Library System which can bring books from book-shelf and placing them back, which removes human interference and thus human-errors from the system. We worked in a team of 3 and I was in charge of construction and working of the robot. The robot worked with Arduino and the controlling system was set on RaspberryPi. (January 2017 – May 2017)
- A bucket size refrigerator that works on just 40 Watts without any moving parts. The refrigerator can be controlled to temperatures between 23°F and 60°F through an onboard control as well as a webpage. The controller used was ArduinoUno with ESP8266. The costing of such a refrigerator is just Rs. 5000/- (INR) (approx. \$70) (January 2016 – May 2016)
- Programmed a multifunction robot (Line Follower, Obstacle avoider, light seeker, computer control, remote control and program control) on ATMEGA32. (November 2008 – March 2009)

RESEARCH DISSEMINATION

- Devaj Parikh and Kiran George, “Conceptual Neuroadaptive Brain Computer Interface for Autonomous Control of Automobile Brakes”, Ubiquitous Computing, Electronics and Mobile Communication Conference (UEMCON), 2020
- Devaj Parikh and Kiran George, “Quadcopter Control in Three-Dimensional Space Using SSVEP and Motor Imagery-Based Brain-Computer Interface”, Information Technology, Electronics and Mobile Communication Conference (IEMCON), 2020