ABHIMANYU PATEL

in abhimanyupatel8/ abhpat

SUMMARY

EDUCATION

EMPLOYMENT

- Manage and fix required code using SAPUI5 framework to help improve the web applications
- Proven track record in efficiently creating schematics to improve hardware design
- Professional with strong technical and analytical skills

UC San Diego

B.S., Electrical Engineering

Aug. 2015 to June 2018

Infosys Ltd.

Associate Software Engineer

Palo Alto, CA July 2018 to Current

Client: Pacific Gas & Electric

Tax Rate Enhancement:

- Developed custom SAP UI5 solution to facilitate the required tax rate changes that can be controlled only by designated employees and update all respective tables in back-end.
- Developed a module using JavaScript and HTML5 where contents will be displayed according to user assigned roles.
- Used RESTful OData Service that presents data from backend to consume them in UI5 application.
- Used ABAP repository for version control.

Smart Table Enhancement:

- Added a smart table functionality for each screen in the application following the MVC architecture.
- Used the "sap.ui.table" library to make the visibility of columns dynamic.
- Optimized User Interface using JavaScript for multiple checkbox selection compared to the one at a time.
- Document artifacts to ensure correct output of the product along with code modifications as required.
- Collaborate with the development as well as support team to overcome the flaws encountered in maintenance of the application following SDLC as well as Agile methodology.

Psemi Corporation

Intern, Reliability Engineering

San Diego, CA

Dec. 2017 to Mar. 2018

- Create, set-up, and debug Reliability HTOL and HAST bias test circuitry
- Help with design of reliability test boards, motherboards and related hardware
- Work with the Incal burn-in system for an integration of inspire software to assist for hardware testbenches
- Assist senior engineers in testing and debugging of semiconductor components using oscilloscopes, power meters and other necessary lab equipments
- Draw schematics for the HTOL and HAST bias test circuitry using OrCAD Capture CIS Allegro

PROJECTS

Bitcoin Hashing, Senior Digital Design Project

Mar. 2018 to June 2018

- Implemented code for developing secure hash output for a set number of words in Altera Quartus software
- Programmed a simplified bitcoin hashing program with the help of SHA256 algorithm using system verilog
- Created sequential as well as parallel design for better area*delay as well as only delay results

Data Analysis, Senior Class Project

Jan. 2018 to Mar. 2018

https://github.com/abhpat/ECE-180-Final-Project

- Helped to achieve clean, usable data in python to use it further for regression model to see correlation between highschool and elementary school performances
- Execute code using several data analysis python libraries like numpy, panda, etc. to achieve least erroneous results
- · Awarded the second best overall score in the class for the project

GPS Algorithm based on Least Squares

Sept. 2017 to Dec. 2017

- · Utilized the steepest Gradient descent as well as Gauss-Newton method to find the minimum error in position with respect to the actual value. Used the above mentioned methods to rectify the error in the measurement called "pseudorange" and get an accurate value.
- Developed the GPS algorithm with the aforementioned methods using MATLAB software with the given data and made comparison plots to show the position accuracy.
- After implementing both the methods for optimization of the position, Gauss-Newton method gave better results for the error in position.

Bar Assist, Arduino controlled Smart Coaster (IoT)

Apr. 2016

- Constructed a smart coaster at a hardware hackathon organized by IEEE and HKN at UC San Diego
- Worked on the software development as well as hardware integration of the pressure & temperature sensor
- The device prototype was designed and built within 24 hours and had the following features:
- Senses the temperature and sends notifications over Bluetooth to the android application based on the configured parameters

PROGRAMMING LANGUAGES: HTML5, CSS3, JavaScript, AJAX Techniques, SAP ABAP, MySQL, Python, Matlab, C, C++, Java, System Verilog

Measures the weight of the glass in order to determine the need for a refill and send notifications over Bluetooth to the android application

SKILLS

SOFTWARE TOOLS: SAP UI5, OrCAD, Allegro, Pspice, Arduino IDE, Xilinx, Simulink, Eclipse IDE, Machine Learning Algorithms, SAP Web IDE HARDWARE: BreadBoards, Arduino and Basys Boards, Function Generators, Oscilloscopes, DMMs, Power Meters, Logic Analyzers

AWARDS

Academic Achievement

- Dean's Honors list recipient (Winter 2016, Spring 2015, Fall 2014, Spring 2014)
- Second Place winner, IEEE UC San Diego hardware engineering hackathon (Spring 2016)
- Academic achievement award, EOPS, Norco College (Fall 2014)



STEM Scholars program

Participant and Member, Norco College (Spring 2015, Fall 2014)