

SACHIN BASAVANI SHIVASHANKARA

1615 Easton Ct, Wheeling, IL | (315) 751-5895

sachinbs93@gmail.com | <https://www.linkedin.com/in/sachinbasavani/>

Personal website: <https://sachinbs.github.io/>

EDUCATION

Master of Science | Computer Engineering | Syracuse University, NY, USA | GPA: 3.70 [Dec 2018]

- Object Oriented Design | Software Modelling and Analysis | Advanced Data Structures and Algorithms | DBMS | Internet Programming | Data, Knowledge and Media Mining | Design patterns | Advanced Computer Architecture

Bachelor of Engineering | Electrical and Electronics Engineering | UVCE, Bangalore University, India | GPA: 3.74 [June 2014]

- Analog Electronics Circuits | Computer Architecture | Microprocessors and Microcontrollers | Electrical and Electronics Measurement | Power Electronics | Transmission and Distribution | Power Systems

TECHNICAL SKILLS AND INTERESTS

Programming Languages: C++, C#, Python, SQL, HTML, CSS, JavaScript, R, Java, C, Assembly level programming

Tools and Technologies: Visual Studio, WCF, WPF, ASP.NET MVC, RStudio, PSPICE, LTSPICE, SmarTest (Advantest), Windows, Linux, UNIX

TECHNICAL PROJECTS

Remote Build Server | C# | Asynchronous Communication | Message Passing | WCF | WPF [Dec 2017]

- Implemented a federated system which automates the building and testing of source code files. Implemented a Client (GUI), Repository, Build Server and Test Harness to achieve this

Dependency based Code Publisher | C++ | Type Analysis | Parsing | HTML | CSS | JavaScript [Apr 2017]

- Created an application which supports publishing of source code (.cpp and .h files) as web (HTML) pages

Type based Dependency Analysis | C++ | Type and Dependency Analysis [Mar 2017]

- Implemented an analyzer which performs type analysis to find all the types and and global functions defined in each of a collection of C++ source files

Human Resource Analytics | R | Feature Engineering | Apriori Algorithm | Decision Trees | Classifiers [Apr 2017]

- Evaluated the attributes behind the attrition rate in a company using a Human Resource dataset and provided corrective strategies

University Database | SQL | SQL Server | Stored Procedures | Functions | Triggers | Cursors [Dec 2018]

- Created a small-scale database to be used in a university setting. Normalized the database to Third Normal Form (3NF)
- Created Stored Procedures, Functions and Triggers to make the database more flexible

UniCart | Web Application | Java | HTML | CSS | JavaScript | MySQL | PHP [Apr 2018]

- Implemented an e-commerce web application targeted for university students to buy, sell or rent any used items. Provides facilities for seller to put items for sale, for other users to bid on an item or rent or buy

Product Comparison | Social Media Mining | Python | Twitter | Sentiment Analysis [Apr 2018]

- Created a tool which provides comparison of attributes between two companies (ex. Samsung and Apple) based on the data mined from the tweets addressed to them

WORK EXPERIENCE

Test Engineer (Post Silicon Validation) | Tessolve Semiconductors Pvt. Ltd | Bangalore, India [Oct 2014 – May 2016]

- Debugged Silicon at Wafer Sort (WS) and Final Test (FT) stages for multicore SOC processors (Mobile and Modem processors of Qualcomm) on ADVANTEST Verigy93K SOC tester platform using SmarTest tool
- Worked on VLSI testing, Scan and Functional debug
- Developed test programs, validated test patterns/vectors
- Improved chip yield, optimized test-time, worked on corners testing and data analysis

Accomplishments:

- Reduced high yield-loss issue for the memory block pattern (SSC-Functional block) on Wafer Sort after working closely with the Design-For-Testability (DFT) team (Reduced yield loss to 12% from 80%)
- Greatly optimized test-time in the production flow (for a Modem chip) by manually hacking into the pattern and its timing file for different files and combining all of them into one single unit with a single test setup section

ACHIEVEMENTS AND OTHER ACTIVITIES

- Awarded 5th rank by Bangalore University in 'Electrical and Electronics Engineering' department (BE)
- Was 2nd topper in the Pre-University college
- Was the President of Electrical club of IEEE UVCE during the final year of Bachelor's degree. Organized several technical events (quizzes, seminars etc.) during my tenure as the president