

SAI KUMAR VURUKONDA

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EDUCATION

Chicago State University | Master of Science (MS) in Computer Science | GPA: 3.9

Chicago, IL August 2021

Jawaharlal Nehru Technological University

Hyderabad, India

Bachelor of Technology (B. Tech) in Electronics and Communication Engineering | GPA: 3.76

May 2018

RELEVANT COURSEWORK

Databases Management Systems | Mobile and Web Technologies Development | Security in Network Computing | Parallel Processing | Business Intelligence | Embedded Systems | Computer Networking | Distributed Computing Theories | System Analysis and Design | Object Oriented Design | Wireless Communication | Image Processing | Data Structures and Algorithms | Machine Learning (ML) | TCP / IP | UDP | Linear Algebra.

TECHNICAL SKILLS

Programming Languages: C/C++, Java, C#, Python, Auto IT, Angular JS, React, Verilog, Bootstrap, Node.js
Database Management: MYSQL, SQL Server DB
Operating Systems: Windows 7 and 10, Linux, Real Time Operating System.
Web Application Frameworks: HTML5, CSS, JavaScript, PHP
Work Management Tool: Agile, Waterfall, JIRA, Scrum-Kanban, TDD
Electronic Tools/Software: Oscilloscope, Wireshark, ARM, Arduino, Waveform Generator, Frequency Calculator

ACADEMIC PROJECTS

Warehouse Management System (C#, MVC, JavaScript, MySQL, HTML, CSS)

Feb 2021 – Apr 2021

- The Warehouse management system is real time warehouse database, capable of handling large inventories of organization.
- Developed cost effective solution that fulfill requirement of **all stakeholders**, created and maintained In and Out transactions of single or multiple stores. Generate billing details of In and Out transactions, providing notifications periodically when stock is low.

Pizza Kitchen Application (C#, WinForms, MYSQL, JavaScript)

Sep 2020 – Nov 2020

- A user-friendly interface, which allows users to choose a variety of pizza sizes, toppings, crust, drinks, and more. It is developed using C#, WinForms, SQL. Updating the Information into the kitchen directly, with the estimated time for the chiefs to keep tracking the orders.

E-Commerce Website (C#, HTML, CSS, Angular JS and SQL)

May 2020 – Jul 2020

- Created a website, allows user to purchase clothing items. Discounts can change based on the categories of cloths, brand, gender,... If any product is the database for one year will send the notification to manager so that offers may change to **±10% to sell** the product.

ICU Patient Monitoring System (IOT) (C#, ASP.NET, SQL, HTML, CSS, LM 7805 IC, pic 18F452, WIFI module, Humidity Sensor)

Jan 2020 - Apr 2018

- The System measures the **patient blood pressure, heart beat rate and temperature constantly**, through IOT will send the data to the website where access will be given to only family members to monitor, observed value will compared with the threshold values in database, if any sudden changes, alarm will buzz at front Desk with room number on LCD, give an alert in the application.

Accident Detection Using GPS and GSM In Fog (HTML, CSS, C#, SQL, Embedded C, ARM 7,7812 IC, Laser Indicator, GSM, GPS)

Feb 2017 – May 2018

- The main aim of this project is to reduce accidents caused due to Smog blocking the vision of the commuters, by lighting a laser light with high frequency onto the road and give a siren to nearby 10 poles, gives an alert to nearby Hospital and Police Station.

Solar Powered Tricycle for the Physically Handicapped (Embedded C, IRF250n MOSFET, UART, Relay Unit, Arduino)

Feb 2018 - Apr 2018

- A Real time self-sustaining electric tricycle that monitors the voltage level of the primary battery and switches over to the auxiliary battery upon low charge detection and relays the latter to the solar charging unit, by using Solar Panel, Lead Acid Batteries, Arduino IDE.

Operation of Vending Machine for Subsidization (Verilog, Xilinx, DC LM2596, NEMA-17, VHDL)

May 2017 – Jul 2017

- Collaborated in a team of four to develop and simulate a creative Verilog barcode scanning system to enable users to swipe a card in vending machines to scan items and receive discounts automatically on product. Coded and debug the program using VHSIC Hardware Description Language (VHDL) to enable machine to recognize barcode, compare with database, and dispense discount accordingly.

Automated Robot for Transportation in Storehouse (Embedded C, Keil, Arduino, L293D Motor, IR Proximity Sensors)

Oct 2017 – Jan 2018

- Robot follows a visual line embedded on the floor, used in military applications, human assistance purpose, delivery services etc.

RELEVANT EXPERIENCE

NCR Corporation

Hyderabad, India

Software Engineering

Dec 2018 – Jan 2020

- Migration of BIOS Access Utilities from Auto IT into C# to provide increased security to ATM software, enabling Internal Customers to manage access to BIOS, change passwords, and boot ATM remotely.
- Developed various Windows desktop APIs and User Experience applications using **C#**, WinForms, and **ASP.NET** to update, Unit Testing and improve ATM BIOS functionality by securing ATM machines when damaged.
- Introduced and developed Task Manger application to deploy Intel ME Firmware, which is used by **75% of the workforce**.
- Worked with collaborative Scrum-based Agile Methodologies, which provides an accurate time estimate and is more efficient for design implementation, test driven development, writing documentation, production, work on code reviews, retrospective meeting.
- Experience in understanding and modifying whole Software Development Life Cycle (SDLC requirements, design, development, testing, deployment, and version control), Updating/Modifying, requirement analysis, functional/design specifications, Test plans designing.

Associate Software Engineering

Jul 2018 – Nov 2018

- Performed Migration, debug, and automation testing from older AutoIT scripts to C# .Net to maintain code integrity.
- Research and executing the Regression Test Cases, manage change requests, bug fixes, and troubleshoot issues.
- Troubleshooting of the customer ATMs, Hard Disk Encryption server issues that contains crucial ATM Decryption keys which can impact the customers transactions data.
- Strong focus on JIRA Administration involving custom projects, workflows, fields, dashboards and reports configurations.

ADDITIONAL TRAINING

NCR Corporation, Visual Studio, MySQL, Android Studio, MATLAB, Verilog Coding, Oracle VM VirtualBox, IOT, Arduino IDE - Arduino Uno R3, java, Azure Web Services, MS Office, Bash, Power Shell, SharePoint, Rest, Git, cloud, UI, Xilinx, WIX.

Activities: Dancing, Critical thinking, Responsive, Creatively, Innovation, Leadership

Transferable Skills: Motivated, ability to Collaborate, Good Communication Skills, Curious, Passion to work, Strong analytical and problem-solving.