## **BLESSY BOBY**

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#### **EDUCATION**

Master of Science in Computer Science and Engineering (Software Systems)

Expected Dec 2023

University at Buffalo, The State University of New York

Relevant Coursework: Introduction to Machine Learning, Algorithms Analysis and Design, Computer Security, Computer Architecture, Data Models and Query Languages, Blockchain

# Bachelor of Technology in Computer Science and Engineering,

Jul 2019

College of Engineering Trivandrum, APJ Abdul Kalam Technological University, Trivandrum, India

## **SKILLS**

Programming Languages: C#, Python (Tkinter, NumPy, Pandas, SciKit-Learn), Bash, Groovy, R (Bioconductor), Solidity, Verilog, C

**Web & Desktop Application Development:** HTML, CSS, Bootstrap, Microsoft Expression Blend, JavaScript, Windows Presentation Foundation (WPF), MVVM, WinForms, ASP.Net (MVC & Web Forms), .NET (Framework & Core), ASP.NET Web/ REST API, Open API (Swagger), jQuery, AJAX, PostgreSQL, Microsoft SQL Server, Testing (NUnit, White Box, Black Box, Integration, System)

**Software and Tools**: Linux, Microsoft Office, Microsoft Visual Studio, Remix, Jupyter, PyCharm, RStudio, Postman, Jenkins, Git, Sourcetree, Bitbucket, Jira, Confluence, PC Guard, Inno, LaTex, MATLAB, METIS

## **EXPERIENCE**

## Roswell Park Comprehensive Cancer Center, Buffalo, NY — Research Apprentice

Jun 2023 - Present

- Analyzing differential gene expression from bulk and single-cell RNA and ATAC sequencing experiments using R, Bioconductor, and Python, integrating data with clinical outcome data to find novel druggable targets in pancreatic cancer.
- Identified outliers in data, highlighting need for further investigation and content review before accepting research findings for publication.

## Bosch Global Software Technologies PVT LTD, Coimbatore, India — Software Engineer

Aug 2019 - Jul 2022

- Developed a custom library for monitoring C# tools used company-wide, enhancing online and offline tracking capabilities.
- Created **Enterprise-grade software tools** in WPF using C# within the .Net framework and Python catered for calibration engineers, **accelerating** calibration analysis process by an impressive **50%**.
- Spearheaded front-end development efforts for Bosch's worldwide internal website redesign, elevating user experience for 80% of the product.
- Provided internal Compilation and Encryption support for Java and C# tools.
- Operated under Agile and Scrum, mastering full software development cycle, including coding standards, version control, builds, testing, and operations.
- Organized "Tea(m)-time" monthly team-building activities to foster effective communication and maintain a vibrant work environment.
- Facilitated comprehensive onboarding and training of new team members.

## VSSC, Indian Space Research Organisation, Trivandrum, India — *Project Intern*

Aug 2018 - Jun 2019

- Built an efficient distributed MPI (Message Passing Interface) framework for solving computational problems, ensuring load balancing
  in a parallel computing environment.
- Worked on data consisting of mesh files in VTK format, which was converted into graphs and partitioned using METIS software.

# **PROJECTS**

# Online Dictionary (React, Material UI, Node.js, MongoDB, Kubernetes, IBM cloud)

Aug 2023 - Present

Online Dictionary built with React and Node.js, hosted on IBM Cloud, to offer word meanings with pronunciation. This project involves the implementation of word parsing and MongoDB storage, a User profile feature with Favorites and Learning, alongside the creation of components for "Word of the Day" and "Trending Words" based on popular searches.

# 8-bit Microprocessor (Verilog, Xilinx Vivado, Basys 3 FPGA Board)

Jan 2023 - May 2023

Designed, implemented, and simulated an 8-bit microprocessor, integrating critical components like program counter, instruction memory, register file, ALU, data memory, multiplexer, and control unit. Additionally, conducted extensive functional verification utilizing the Basys 3 FPGA board.

## Bank of Buffalo (pgAdmin, ElephantSQL, HTML5, Bootstrap, Express, jQuery)

Jan 2023 - May 2023

**Database management system** and user-friendly Web application to efficiently store, manage, and retrieve data related to branches, users, user accounts, and transactions, enhancing customer and staff interaction.

# Pokemon In A Block (Solidity, Truffle, Ganache, Goerli, Infura, OpenZeppelin, Web3, JavaScript)

Jan 2023 - May 2023

Conceptualized, tokenized, and deployed Pokemon cards into a **decentralized ecosystem**, fostering secure, transparent, and tamper-proof card trading while boosting trust and reliability within the community.

#### **CERTIFICATIONS**

• RBEI-NIPUN: Data Certified, Simplilearn: Statistics, Data visualizations, Predictive analytics, Hadoop Big Data framework, PySpark, and Amazon Web Services (AWS)

### **ACHIEVEMENTS**

- Bravo Award, Bosch, 2021
- Spot Award, Bosch, 2020
- Microsoft Student Partner, 2017