AMIT DEB

(707) 570-7676 | amit.deb.stu@gmail.com | linkedin.com | github.com

EDUCATION

Sonoma State University - *Rohnert Park, CA* Aug 2019 – May 2023

- BS in Computer Science: Department Honors
- GPA - 3.5
- Coursework: Algorithm Analysis, Cloud Computing, Computer Vision, Data Structures, Database Management Systems Design, Software Design and Development

CERTIFICATION

Professional Google Cybersecurity - *Coursera* 2024

- Mastered cybersecurity for organizations by mastering common threats, mitigation, networking, SIEM tools, Python, Linux, and SQL.

EXPERIENCE

Sonoma State VITaL Lab - Software Engineer Intern Jan 2023 - May 2023

- Developed a VR Experience in Unreal Engine 5.0, leveraging Meta's Quest and HTC's Vive VR hardware for comprehensive testing and debugging.
- Utilized C++ APIs to implement a sophisticated VR interface, seamlessly integrating controllers to facilitate interactive experiences within the virtual environment.
- Engineered and fine-tuned the VR interaction system, ensuring precise and immersive user engagement through the seamless integration of hardware and software components.

CODING PROJECTS

Pneumonia in COVID X-Ray Neural Network | *Python, PyTorch, Keras, TensorFlow, Github*

- Created a convolutional neural network to classify Pneumonia in COVID patients' X-rays
- Tested and prevented two types of bias with given data using JSON and Python scripts
- Leveraged Google's TensorFlow library to program the neural network
- Optimized the model using hyper-parameters give the best training and testing accuracy of 96% and 92% respectively

Restaurant Management Database | *SQL, App.js, Linux, HTML, SCRUM,, AGILE, Github*

- Performed conceptual data modeling using MySQL for restaurant database architecture.
- Developed and implemented modules for HR, payroll, and inventory management.
- Constructed SQL functions to calculate profit margins based on operational data.
- Deployed database to a server, enabling web-based access and management.

C++ Python Interpreter | *Python, C++*

- Built a C++ Python interpreter using AST parsing and bytecode generation for efficiency.
- Implemented core Python features: variables, data types, operators, control flow, functions.
- Developed a memory management system for dynamic allocation and garbage collection.
- Built a basic standard library, enabling common Python operations such as I/O, math, and string manipulation.

Skills

Languages: Python, C++, C#, C, SQL, Javascript, UNIX, RISC-V, HTML, JSON
Frameworks / Tools: Tensorflow, OpenCV, Git, Visual Studio, React, MariaDB, Google Cloud, AGILE, SCRUM