Sachith Chandran

Champaign, IL | src14@illinois.edu | +1 217-902-0992 | linkedin.com/in/sachithchandran/
github.com/sachithrc

Education

University of Illinois Urbana-Champaign, Champaign, IL — August 2023 – May 2027

- Candidate for Bachelor of Science in Computer Engineering and Physics
- **Coursework:** Multivariable Calculus, Linear Algebra, Special Relativity, Introduction to Computer Engineering, Classical Mechanics, Electricity and Magnetism, Computer Systems and Programming, Discrete Mathematics, Classical Mechanics, Data Structures, Introduction to Electronics, Differential Equations

Experience

Intern, Heidelberg Cement (CIMTOGO) – Lome, Togo — June 2022 – July 2022

- Analyzed data on kiln and plant operations
- Provided daily reports of kiln operations to the plant manager
- Worked with CAD software to design new parts for the packaging plant during the initial shutdown period, supervised by the head of the electrical department

Senior Reviewer, Outlier AI – Remote — June 2024 – Present

- Responsible for evaluating the quality and accuracy of AI generated code
- Responsible for writing and debugging optimal code solutions to problems in Python
- Senior reviewer for problems in mathematics and physics; review the problem and solution given by the AI chat bot to improve the quality of future answers and make AI more reliable for educational purposes

Projects and Research

Vending Machine Logic Implementation — March 2024

- Developed the sequential logic for a vending machine using finite state machines to dictate the next states
- Utilized sensors to differentiate between dimes and quarters
- Made use of NAND and NOR transistors, D flip-flops, buttons, resistors, and LED's to make a circuit board demonstrating said sequential logic and visualizing all possible next states
- Drafted the sequential logic using Xilinx Vivado Software
- Created my own test cases using Systemverilog software
- Tools Used: Systemverilog, Circuit Design and Logic Development, Xilinx Vivado

Machine Learning Model — August 2024

- **Project Goals:** Developing a machine learning model (focusing on linear regression) to predict the amount of games won by a NBA team during the 2024-2025 season using data from the past 4 years
- Skills Used: Python, Pandas, Scikit Learn, Linear Regression, Data Analysis

Automated Trading Platform — August 2024

- **Project Goals:** Develop an automated trading system in C++ capable of real-time data processing, strategy execution, and order management
- Skills Used: C++, Data Handling, Trading Algorithms, API integration

Skills and Concepts

Programming: C++, C, Python (Pandas, Scikit Learn, Matplotlib, Scipy, NumPy, PyTorch, TensorFlow, EWS Linux, Linux Terminal

Concepts: Data Structures and Algorithms, Object Oriented Programming, Back-end Development, Probability and Statistics, Discrete Mathematics, Linear Algebra, Machine Learning/AI