# SUDHARSAN BALA.II

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#### **EDUCATION**

## University of Texas at Dallas, Richardson, TX

May 2025

Bachelor of Science, Computer Science

GPA: 3.46

**Relevant Coursework:** Advanced Data Structures and Algorithms Analysis, OS, Comp Arch, Software Engineering, Database Systems, Intro to Machine Learning, Systems Programming in UNIX, Cyber Attack and Defense

Awards & Honors: Dean's List Fall 2023

#### **SKILLS & CERTIFICATIONS**

- Skills: Python, Java, C, C++, JavaScript, TypeScript, Linux, HTML, SQL, CSS, MIPS
- Tools: Pandas, NumPy, JUnit, Firebase, React, BeautifulSoup, Selenium, Excel, Git, Expo
- Certifications: AWS Certified Cloud Practitioner, Building Chatbot with SAP conversational AI, Generative AI at SAP

## PROFESSIONAL EXPERIENCE

#### **Inovar Packaging Group,** Dallas, TX

# **Software Engineering Intern**

June 2023 – August 2023

- Solely engineered and executed a streamlined web scraping script with Python, autonomously extracting pertinent information from prominent news websites such as CNN and Labels & Labeling
- Developed a Django backend framework for scripting and integrated it into a larger microservice for automation
- Transformed the data into a user-friendly format and used Twilio API to send the information as an regularly reoccurring email in a seamless process.

#### **PROJECTS**

## **Proximal Policy Optimization Algorithm**

- Implemented a Proximal Policy Optimization algorithm using PyTorch, Tensorflow, and numpy for the Advanced Networks Research Lab as a research assistant
- Leveraged PyTorch for neural network design and training, handling complex tensor operations and ensuring optimal performance
- Conducted extensive testing and debugging to resolve issues related to batch data handling and model evaluation

# Library Management System | Java, MySQL, Python, Git

- Engineered an intuitive Graphical User Interface (GUI) empowering users to seamlessly search, borrow, and return books within an extensive library comprising over 15,000 titles
- Implemented efficient data population in a MySQL database utilizing CSV files, enhancing the system's scalability and data management capabilities

# Gardening App | React-Native, Expo, Figma, Git

- Working on front-end development of a gardening app using react-native framework
- Utilized Figma to design the interface of the screens and Expo-cli to test changes
- Developed a rich mobile UI with multiple new features

# **EXTRACURRICULAR ACHIEVEMENTS**

#### Eagle Scout | Boy Scout Troop 1999

2014 - 2021

- Conceptualized a community service project in which I led 10+ volunteers over 3 weeks to raise over 720 lbs. of food
- Served as Senior Patrol Leader, in which I organized, initiated, and communicated troop meetings with the coordination of other leaders