

# RAVINDRA BABU DEVABHAKTUNI

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## EDUCATION

**Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science**

*Master of Science in Computer Science*

May 2024

**Cumulative GPA:** 3.51/4.00

**Relevant Coursework:** Programming Languages, Design & Analysis of Algorithms, Design Patterns, Database Systems, Data Mining, Cloud Computing, Software and Engineering Project Management, Operating Systems, Computer Architecture & Organization

**Koneru Lakshmaiah Education Foundation**

*Bachelor of Technology in Computer Science and Engineering*

May 2022

**Cumulative GPA:** 4.00/4.00

## TECHNICAL SKILLS

**Languages and Scripting Languages:** Python, Java, C, JavaScript, HTML, CSS

**Tools and Frameworks:** React, Spring Boot, Django, Flask, Docker, Kubernetes, Git, GitHub

**Database and Others:** Oracle, PL/SQL, PostgreSQL, MongoDB, Machine Learning Algorithms, Data Structures

**Certifications:** Advanced Machine Learning, Automation Anywhere Certified Advanced RPA Professional

## PROFESSIONAL EXPERIENCE

**Avishkar Tech Solutions, Artificial Intelligence Intern** | Hyderabad, India

May 2020 – August 2020

- Developed an AI-powered chatbot using Python and TensorFlow, integrating ML algorithms including recurrent neural networks (RNNs) and long short-term memory (LSTM) networks to understand and respond to user queries effectively
- Achieved a 15% increase in accuracy through data preprocessing and fine-tuning of the chatbot's neural network architecture, resulting in increased user engagement and satisfaction
- Conducted thorough research on user interaction patterns and incorporated sentiment analysis techniques to further refine the chatbot's responses

## PROJECT EXPERIENCE

**Stock Price Forecasting and Trading Strategy Optimization, Machine Learning Engineer** | Independent Project

- Utilized machine learning techniques (RF, SVM, NN) for stock forecasting and trading, achieving over 10% positive predictions, and enhanced performance through feature selection, model ensembling, and AdaBoosting
- Developed a Reinforcement Learning trading policy using policy gradient and Q-learning, integrating predictive models for optimal decision-making, achieving significant returns with a Sharpe Ratio of 2.5

**Global Job Analysis and Visualization, Full Stack Developer** | Independent Project

- Executed a comprehensive analysis of global job postings using MongoDB, uncovering insights on job trends, company hiring patterns, salary distribution, and job preferences
- Established a user-friendly web interface utilizing HTML and CSS, enabling users to examine and analyze the results of the analysis interactively

**Cloud-Based Health Management System, Team Member** | Group Project

- Developed a cloud-based platform for instant access to EHRs for healthcare providers and patients using MongoDB for data management, Node.js for backend, Docker for containerization, and Kubernetes for video conferencing
- Implemented secure logins to protect the privacy of data and demonstrated expertise in containerization and front and back-end development

**Sentiment and Hate Speech Analysis Dashboard, Full Stack Developer** | Independent Project

- Designed and built a web dashboard using Flask and PostgreSQL to analyze and visualize sentiment and hate speech trends from Reddit, 4chan, YouTube, and political discussions
- Leveraged Matplotlib for dynamic data visualizations and established comprehensive data querying and error handling to ensure an effective user experience

**Library Management System, Backend Developer** | Independent Project

- Architected and engineered a feature-rich Library Management System using Java and employed Spring Boot to improve maintainability and streamline development
- Integrated MySQL database for management of books and borrowers, ensuring optimal library operations

**Project Management Dashboard, Frontend Developer** | Independent Project

- Created and deployed a dynamic project management dashboard with JavaScript and React and crafted attractive user interfaces for smooth task delegation, project monitoring, and progress tracking
- Utilized the use of JavaScript libraries such as jQuery for enhanced scalability and responsiveness in project management

## PUBLICATIONS

Dr. T, Dr. Pvvv, Ravindra Babu Devabhaktuni, Vamsi, P, & B. (2022). Detection of COVID Disease from CT Scan Images using CNN Model. 2022 Second International Conference on Artificial Intelligence and Smart Energy (ICAIS) (pp. 1-6). IEEE. <https://doi.org/10.1109/ICAIS53314.2022.9742758>