# Manoj Virinchi Chitta

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## EDUCATION

**University of Florida**                                                                                              Gainesville, FL
*Master of Science in Computer Science*          *CGPA: 3.9/4*                                      *Aug. 2023 – May. 2025*
**Courses:** Analysis of Algorithms, Advanced Data Structures, Distributed Operating System and principles, Computer Networks, Computer Vision, Natural Language Processing, Data Engineering, Introduction to Data Science

## EXPERIENCE

**Software Engineer**                                                                                              *Jun. 2022 – Jul. 2023*
*Deloitte USI*                                                                                                          *Hyderabad, India*
- Acquired professional certifications in **UiPath** and **Power Automate** following rigorous training on Udemy, demonstrating an advanced mastery of automation tools. This achievement significantly improved workflow management efficiency by 30%.
- Developed and coded custom automation solutions for system solutions development and debugging, aligned with banking client needs, resulting in a 60% reduction in execution time and an 80% decrease in manual system analyses on **Virtual Machines**, significantly improving cost-effectiveness and operational efficiency.
- Designed and implemented advanced automated solutions within SAP environments, streamlining intricate processes and reducing execution time by 60%, leading to substantial cost savings.
- Implemented **unit testing**, debugging, and peer code reviews to ensure scalable and secure software development aligned with client requirements, demonstrating a commitment to best practices.

**Internship**                                                                                                          *Jan. 2022 – May. 2022*
*Deloitte USI*                                                                                                          *Hyderabad, India*
- Developed pipelines for multiple workflows using **Azure DevOps**, aiding diverse teams in project transition from the development environment to a higher environment and reduced the effort by 20% leading to faster delivery.
- Created and distributed a strategic survey for Deloitte teams, enhancing data collection and analysis proficiency and resulting in a 30% increase in actionable insights for workflow migration needs.
- Secured a 90% score on the **AZ-900 certification**, showcasing enhanced proficiency in cloud technology and engineering robust cloud service solutions.

## PROJECTS

**InciSense** | *Python, SQLite, SpaCy,NLTK,Gradio*                                                      *Aug. 2024 – Oct. 2024*
- Developed an **automated pipeline** for incident data extraction and storage with a **90% accuracy rate**, showcasing expertise in scalable systems and process optimization.
- Built a customizable redaction tool using **SpaCy** and **NLTK** to censor sensitive information (e.g., names, dates, addresses, concepts) in public documents, reducing manual processing by 60%.
- Enhanced the project by adding a web-based interface to visualize incident data with three key visualizations: clustering of records, comparative bar graphs, and a custom chart using **Gradio,Matplot** and **Seaborn**, improving data interpretability and insights by 50%.

**Impact of Attention Mechanism on Question Answering in Transformers** | *Bert, LSTM*         *Feb. 2024 – May. 2024*
- Co-authored and researched the impact of attention mechanisms in **BERT**, optimizing attention heads to achieve a 20% improvement in question-answering accuracy, showcasing expertise in natural language processing.
- Executed a comparative analysis utilizing the SQuAD v2.0 dataset, illustrating that fine-tuning attention mechanisms boost performance by 15% before overfitting, Demonstrating expertise in machine learning and model optimization.
- Executed comprehensive unit testing and debugging to ensure reliable outcomes.

**Gator Library Management System** | *Java, Red-Black Tree, Min-Heap*                              *Oct. 2023 – Nov. 2023*
- Achieved 95% operational efficiency by implementing a **Red-Black Tree** to manage over 1,000 book operations with logarithmic complexity.
- Prioritized patron reservations using a **Min-Heap**, reducing reservation processing time by 50% and enhancing system responsiveness.
- Automated file-based input/output, handling 100% of library tasks with zero runtime errors, leading to a 40% improvement in workflow efficiency.

**Comprehensive Aquaculture Management System** | *HTML, CSS, JavaScript, PHP, SQLite*            *Jun. 2024 – Jul. 2024*
- Designed and implemented a web-based aquaculture management system, improving operational efficiency by 40% through real-time data processing and resource tracking.
- Enhanced user experience with a responsive design and interactive UI elements, increasing engagement and usability by 30%.
- Integrated advanced filtering features using a date range picker, reducing manual data sorting efforts by 50%.

## TECHNICAL SKILLS

**Languages**: Java, Python, C/C++, SQL (Postgres), JavaScript, Typescript,R,HTML, CSS, PHP
**Frameworks**: REST API's,React, Node.js, Flask,Bootstrap, Streamlit,Gradio
**Developer Tools**: Git, Docker, Microsoft Azure, Google Cloud Platform, AWS, Visual Studio,Power Automate, UiPath, Azure DevOps, MongoDB, Firebase, Hadoop,SQLite3
**Libraries**: pandas, NumPy, Matplotlib,Pytorch,Scikit-Learn, BeautifulSoup, NLTK,SpaCy,Langchain
**Testing Framework**: JUnit, Mockito,Selenium