

# SAI SANJAY POTLURI

+1(470) 667-0979 | [saisanjaypotluri@gmail.com](mailto:saisanjaypotluri@gmail.com) | [LinkedIn](#) | [GitHub](#)

## TECHNICAL SKILLS

---

**Languages:** Python, SQL, Java, JavaScript, HTML, CSS, C++

**Developer Tools:** MS Excel, Tableau, Git, Docker, VS Code, IntelliJ, Eclipse,

**Frameworks & Libraries:** pandas, NumPy, TensorFlow, React, PyTorch

**Concepts:** Business Analysis, Data visualization, Time-Series Analysis, Process Optimization, Statistical Analysis, RESTful APIs, Agile Methodologies, Web crawling

## EXPERIENCE

---

### Graduate Research Assistant

Aug 2024 – Jul 2025

Kennesaw State University

Atlanta, GA

- Developed Human-AI frameworks for both mental health diagnostics (86.23% accuracy) and fake news detection (83.1% F1-score) using LLMs (Phi-3.5/Mistral/Gemma)
- Published research on synthetic data generation (Applied Computing and Intelligence), achieving 83.1% consensus similarity in mental health assessments(DOI: [10.3934/aci.2025009](https://doi.org/10.3934/aci.2025009)).
- Created hybrid annotation systems combining 4 LLMs + human experts, improving accuracy by 15-22% across domains
- Generated 2,040 synthetic mental health scenarios and analyzed 44,898 news articles using PyTorch/Transformers
- Reduced human workload 32-39% via adaptive clustering and gating mechanisms

### Associate Professional Software Engineer

Feb 2023 – Aug 2023

DXC Technologies

Hyderabad, India

- Synthesized and maintained ATM applications using IBM mainframe technologies: COBOL, JCL, IMS-DC, and IMS-DB
- Monitored performance of 100+ jobs and debugged errors, ensuring 99.9% of system uptime.
- Collaborated with 3 cross-functional teams, improving application efficiency by 25%.

### Data Science Intern

Dec 2022 - Jan 2023

TwiLearn Ed Tech Pvt. Ltd

Hyderabad, India

- Collected, transformed, and analyzed 6+ years of sales data using Python libraries (Pandas, NumPy) to drive informed decision-making.
- Visualized 5 Tableau dashboards to visualize sales trends over a decade, enabling data-driven insights and improving decision-making by 15%.
- Compiled 3 key KPIs for profit, units sold, and category-based profits, supporting 5 critical business decisions.
- Summarized complex data insights to non-technical stakeholders, demonstrating strong oral and written communication skills.

## PROJECTS

---

### Heart Disease Diagnostics | Python, NumPy, Pandas

Oct 2022 - Dec 2022

- Processed and analyzed a dataset of 1,000+ patient records, examining 10 vital health statistics.
- Integrated descriptive and inferential statistical tests, including T-tests, ANOVA, and Linear Regression.
- Visualized 5 data visualizations to highlight trends and correlations, improving pattern recognition efficiency by 40%.

### Shopping Cart | C#, HTML, CSS, JavaScript, SQL

Apr 2024 – May 2024

- Designed and implemented a database system managing 500+ car parts across 10 categories.
- Scripted SQL queries for data extraction and analysis to support business decision-making.

- Automated reports for sales trends and inventory management, demonstrating ability to design rigorous methods of analysis.

### Home Automation | *Python, HTML, CSS, Arduino UNO*

Nov 2021 - Jan 2022

- Modeled a responsive web interface using HTML and CSS for controlling home automation devices.
- Integrated frontend with Arduino-based backend for real-time device control.
- Demonstrated ability to work on full-stack projects involving both hardware and software components.

### SAM: A Smart Assistant| *Speech\_recognition, pyttsx3, pywhatkit, pyjokes*

Mar 2022 – May 2022

- Built a Python-based virtual assistant with a user-friendly interface for voice command processing.
- Incorporated external APIs for features like YouTube playback and Wikipedia information retrieval.
- Implemented error handling for robust performance in various usage scenarios.

### Airline Management System | *COBOL, JCL, IMS-DB, IMS-DC*

Feb 2023 – Apr 2023

- Engineered a control logic in COBOL to calculate passenger discounts based on various input criteria.
- Utilized JCL, IMS-DB, and IMS-DC for database management and transaction processing in a mainframe environment.
- Collaborated with a team of five to debug, test, and deploy the airline management system on a remote mainframe.

## EDUCATION

---

### Kennesaw State University (CGPA: 3.3)

Atlanta, GA

*Master of Science in Computer Science*

*Jul 2025*

**Relevant Coursework:** Data Structures, Algorithms, Object-Oriented Programming, Web Development, Database Systems, Machine learning, SQL

### Jawaharlal Nehru Technological University

Hyderabad, Telangana, India

*Bachelor of Technology in Electronics and Communication Engineering.*

*Aug 2022*

## PROFESSIONAL SUMMARY OF SKILLS

---

- Strong attention to detail in system monitoring and error resolution.
- Advanced MS Office proficiency, especially Excel for large-scale data tracking and reports.
- Excellent communication and stakeholder engagement experience.
- Demonstrated adaptability across industries (finance, education, tech).
- Strong foundation in analytical problem-solving, risk control, and end-to-end operations management.

Portfolio website: <https://saisanjaypotluri.github.io/>