

Sagar Swami Rao Kulkarni

sagarswamirao@gmail.com | +1(303) 434 7446

sagarswamirao.github.io | [Linkedin.com/in/sagarswamirao](https://www.linkedin.com/in/sagarswamirao)

Education

MS in Computer Science | University of Colorado Boulder, Boulder, CO, USA: GPA:4/4

May 2025

Relevant Courses: Foundations of Software Engineering, Computer Vision, Natural Language Processing, Cloud Computing

B.Tech in Computer Science and Engineering | CMR University, INDIA: GPA: 9.41/10 (Gold Medalist)

Aug 2020

Relevant Courses: Machine Learning, Design and Analysis of Algorithms, Programming with Java and Python

Technical Skills

Database Systems: MySQL, MongoDB, Neo4J, Redis

Programming Languages: C, C++, Java, Python, JavaScript, TypeScript

Frameworks & Libraries: Angular, React.js, Flask, Spring, Popoto.js, Three.js

Tools and Technologies: HTML, CSS, Docker, Eclipse, Jupyter, VSCode, Spring Suite, Git, GitHub, Postman

Experience

AI Full-Stack Developer | [Quinnox](#) | Bangalore, IN

Jan 2021 – Jul 2023

- **QInfinite:** Led the design and development of an Enterprise Resource Graph and AR-VR landscape using Angular, Popoto.js, and Three.js, resulting in a digital replica of the client's cloud infrastructure and workspaces for the upcoming product. Additionally, optimized memory-intensive and time-consuming REST APIs in collaboration with cross-functional experts, achieving an impressive 80% reduction in compute time.
- **Martin Brower-Perfect Order:** Innovated an object detection model using computer vision to track loading and wrapping stations in the client's warehouse, achieving an impressive 76% detection accuracy and significantly enhancing operational efficiency. Additionally, implemented parallel processing techniques to optimize training time, reducing it from 2 hours to an astonishing 32 minutes per epoch, enabling faster model training and improved productivity.
- **Martin Brower-Labor Planning Tool:** Championed end-to-end full-stack app development, streamlining inventory and employee management across client delivery centers. Successfully proposed and implemented pioneering features, automating previously manual tasks, and reducing employee management time by 50%—from 4 hours to just 2 hours.
- **Home Healthcare Orders:** Designed and developed a full-stack app to digitize home healthcare treatment workflows, leading the entire software development lifecycle from design to deployment. Implemented Python scripts, reducing data injection time by nearly 62.5% (from 4 to 1.5 hours). Additionally, introduced real-time data sync with Redis.

NLP Full-Stack Intern | [Senseforth AI](#) | Bangalore, IN

Mar 2020 – May 2020

- **KnowledgeBot:** Initiated the development of scalable parsers for PDFs, PPTs, and Word documents using NLP techniques, leading to enhanced document parsing capabilities within the system. Implemented APIs for seamless integration, resulting in more accurate and efficient user interactions.

UI-UX Intern | Metalab Innovation | Bangalore, IN

Jul 2019 – Aug 2018

- **MetaSense:** Developed and implemented a responsive dashboard in React, seamlessly integrating data from diverse sources, including Amplitude Metrics, MySQL, and MongoDB via backend REST APIs. This streamlined data access, resulting in a 20% improvement in operational efficiency and enhanced data-driven insights for MetaSense.

Projects

Human vs Machine Generated Text Classifier

Oct 2023 – Present

- Participated in SemEval 2024 competition, achieving 87% F1 score in distinguishing human generated from machine generated text. Conducted feature engineering and fine-tuning of RoBERTa models. Publishing a paper on the same.

Phone Like-Dislike Classification

Jan 2020 – Aug 2020

- Developed and implemented MP Neuron and Perceptron models to predict market acceptance of phones based on specifications, leveraging real data from GSM Arena; achieved an accuracy rate of 82% in classifying phones into like-dislike preferences. Documented and published an [IEEE paper](#) on the same.

SecQ-Steganography

Aug 2018 – Dec 2018

- Pioneered an advanced data-concealing steganography technique within images, fortified with the dual layers of encryption methods AES and DSA. This innovative approach, complemented by MD5 hashing, delivered an unparalleled level of security and data protection, ensuring the utmost confidentiality and integrity of concealed information.

Key Achievements

- Received the 2022 **On the Spot Award** and the 2021 **Pat on the Back Award** for outstanding performance & contributions.
- Won the **Zonal Level** title in the Azure Skynet Hackathon, organized in collaboration with IIT Hyderabad in 2018.