# SOUMANIL SARKAR

Kumaraswamy Layout, Bengaluru-560078

### Education

# Dayananda Sagar College of Engineering

B.Sc. in Computer Science (Data Science)

Dec 2022 – Sep 2026 Bengaluru, Karnataka

• Research Methods

#### Relevant Coursework

- Data Analysis
- Product Management Machine Learning
- Database Management
- Artificial Intelligence
- Computer Vision
- NLP
- Data Visualization
- Product Analysis

# Experience

## Arc.ai — AI Engineer (Research and Growth)

June 2025 - Present

Remote / Bengaluru

- Conducting market research to support product positioning, competitor mapping, and early-user discovery.
- Designing growth strategies through A/B experimentation, cohort analysis, and funnel drop-off analysis.
- Supporting content generation using LLMs to create product marketing collateral and educational material.
- Collaborating cross-functionally with product and engineering teams to shape strategy from idea to insight.

# Matrix Exports — Business Development Executive

Nov 2024 - Jan 2025

Bengaluru, Karnataka

- Automated documentation and customs workflows via Excel macros and spreadsheet pipelines.
- Led market research to identify global expansion opportunities and built HR automation pipelines.
- · Built marketing content pipelines to engage international clients with personalized outreach.

## **Projects**

#### Churn Prediction System | Python, Scikit-learn, Streamlit

June 2025

- Developed a classification-based tool to predict customer churn using behavioral data.
- Created a Streamlit dashboard to visualize churn likelihood and simulate retention outcomes.

#### Stock Assistant | Python, NLP, Yahoo Finance API

May 2025

- Built a stock assistant that fetches live market data and interprets user queries via NLP.
- Implemented trend prediction and visualization tools using Plotly and Seaborn.

#### Employee Attrition Prediction | Python, SHAP, Machine Learning

Apr 2025

- Trained models to forecast employee exits using HR analytics datasets.
- Used SHAP for interpretability to identify high-impact attrition drivers.

## Smart LeadGen Tool | Python, Streamlit

May 2025

- Created a CSV-based lead qualification pipeline enriched via LinkedIn scraping.
- Scored and filtered leads with built-in automation—no database needed.

#### Travel Planner Application | Gemini 2.0, SerpAPI, Streamlit

May 2025

- AI-powered itinerary planner using Gemini LLM and real-time place discovery via SerpAPI.
- Enabled dynamic planning with conversational UX and Streamlit frontend.

# Jarvis Desktop Assistant | Python, NLP, API Integration

Feb 2025

- Automated desktop tasks via voice commands, including system control and web scraping.
- Used NLP, speech recognition, and APIs to handle natural commands and small talk.

## Face & Gaze Detector | Python, OpenCV, Deep Learning

Mar 2025

- Implemented facial landmark and gaze tracking in real-time using OpenCV.
- Enhanced deep model performance for responsive gaze and behavior analysis.

Product Teardown: DrinkPrime | Market Research, Storytelling

Dec 2024

- Analyzed product value chain, IoT functionality, and subscription experience.
- Offered recommendations based on user feedback and competitive positioning.

## Marketing for Credit Card Company | Pandas, Autoencoders, PCA, Matplotlib, Seaborn

Mar 2025

- Performed data cleaning and feature selection on credit card customer data.
- Used PCA and Autoencoders for dimensionality reduction and insights on customer behavior.

## Technical Skills

Languages: Python, C, HTML/CSS, SQL

Developer Tools: VS Code, PyCharm, Google Colab, Jenkins, Docker, Jupyter Notebook, Jira, Streamlit, Replit, Power

BI, MySQL

Tech & Frameworks: OpenCV, Matplotlib, PyTorch, NumPy, Pandas, Seaborn, TensorFlow, GitHub, WordPress Automation & Tools: Prompt Engineering, Microsoft Excel, Office Suite (Word, PowerPoint), Notion, Zapier, n8n, Make.com, Gemini, SerpAPI

## Extracurricular

Music Producer Spring 2020 – Present

Independent

• Collaborated with artists in the DHH space, leveraging sound design, sampling, and engineering skills.