

# Shiv Vyas

[shivvyas3030@gmail.com](mailto:shivvyas3030@gmail.com) | (609) 455-2183

[LinkedIn](#) | [Portfolio](#) | [GitHub](#)

*Product-Oriented Software Engineer with over 3 years of experience in developing scalable SaaS platforms and intelligent systems across Cloud, IoT, and AI. Experienced in driving full product lifecycles—from architectural design to deployment with a strong focus on reliability, scalability, impact, and user experience.*

## PROFESSIONAL EXPERIENCE

### Johnson & Johnson (Consultant) / Technical Architect

*Aug 2022 – Present / Raritan, NJ*

- Lead the architecture and development of a **GxP-compliant** IoT platform connecting **70+ catheter calibration systems** across global enterprise and partner sites. Replace **legacy systems** with real-time edge/cloud pipelines to reduce workflow delays from **two days to real-time**.
- Drive innovation in contact lens inspection at **J&J Vision Labs** by designing AI-based **defect detection** models (**95% accuracy**) for **image analysis**. Build a complete **data acquisition pipeline** for image collection, contextualization & preprocessing within existing infrastructure. Replace **rule-based** systems (e.g., **Keyence**) with a scalable ML-driven solution.
- Serve as **Quality Assurance Lead** for a digital surgery platform with **100,000+** lines of code (Embedded C, Java, React, Python, Node.js). Lead test framework development and automation across REST APIs, CI/CD pipelines, and Azure IoT components—including IoT Hub, Event Hub, Azure Functions, Kafka, edge devices, and Docker. Oversee **test automation** including **regression, integration, and load testing** to ensure system performance, scalability, and reliability.
- Built **LSTM**-based predictive maintenance models using **time-series** vibration sensor data with Fourier transformation to detect anomalies and predict faults, reducing machine downtime by **40%** across manufacturing sites. **Optimized and containerized models** for deployment on **low-compute edge nodes**.
- Drove data gap analysis in **Databricks** to identify data loss in **24x7 sensor streams**, processing over **18M** records from SQL Data Base's, Azure Delta Lake, & Blob Storage in critical manufacturing environments.

### Engage AI & Florida Institute of Technology / Data Engineer

*Jun 2021 - Feb 2022 / Melbourne, FL*

- Built a platform to help nations achieve **United Nations'** Sustainable Development Goals.
- Scraped and compiled over **1.5M+ socioeconomic** data points from the UN, IMF & World Bank; developed a UI for efficient data analysis using flask, ngrok, firebase, & python.

### Renesas Electronics Americas / Business Analyst Intern

*May 2020 – Aug 2020 / Palm Bay, FL*

- Facilitated the integration of **two company acquisitions** into Renesas' digital ecosystem by leading comprehensive gap analysis, programming, and testing of the proprietary RORE platform. Reduced order processing time by **40%** and decreased employee training costs by **60%**.
- Consolidated data from Oracle, SAP & NetSuite using Model N, improving enterprise-wide collaboration.

### Scudo Systems LLP / Co-Founder

*Jan 2017 – Jul 2019 / Ahmedabad, India*

- Designed a vehicle security system under **\$80**; won 2017 Start-Up India Yatra among **2,200+** start-ups.
- Raised INR **1.2M** in funding to support product development and commercialization, facilitating successful expansion and retaining 5% equity post-exit in 2019.

## SKILLS

- **Programming Languages:** Python, C, C++, SQL, Java, Bash Scripting
- **Machine Learning & AI:** Pandas, NumPy, PyTorch, PySpark, Keras, TensorFlow, Scikit-learn, TinyML, OpenCV, CUDA, Polars, Time-Series Modeling, AutoML, Hyperopt, NLP, NLTK, LSTM, CNN, RNN, DNN, FFmpeg
- **Data & Analytics:** Databricks, Data Factory, Delta Lake, PySpark, SQL DB, ETL/ELT, Data Lake Storage, Matplotlib, Plotly, Streamlit, Pipeline (Cleansing, Wrangling, Visualization, Modeling, Deployment)
- **Other Competencies:** Agile, Requirements Gathering, Product Designing, Quality Assurance, Test Automation

## EDUCATION

### M.S. in Computer Science

*Florida Institute of Technology, Melbourne, Florida*

*Graduated: May 2021*

*Cumulative GPA: 3.7*

- **Teaching Assistant:** Taught Python programming & Linux to **100+** sophomores.
- **Semi-Automated Grading System** - Developed an automated grading system to reduce grading time by 60%

### B.E. in Computer Engineering

*Gujarat Technological University, Ahmedabad, India*

*Graduated: July 2019*

*Cumulative GPA: 3.6*