

Apurva Aggarwal

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EDUCATION

Michigan State University

East Lansing, MI

Bachelor of Science in Computer Science, Minor in Business

May 2027

- **GPA:** 3.95 — **Dean's List**, 5 semesters
- **Relevant Coursework:** Data Structures & Algorithms, Artificial Intelligence, Big Data Analysis, Cloud Development

TECHNICAL SKILLS

Languages: Python, SQL, C/C++, JavaScript, R, ARM64 Assembly

Data/ML: Pandas, NumPy, scikit-learn, PyTorch, PostgreSQL, SQLAlchemy

Cloud/Systems: Azure, Docker, Git, GitHub Actions, REST APIs, Flask, Docker Compose, CI/CD

Analytics: Power BI, Tableau, Excel, KPI Design, A/B Testing

EXPERIENCE

Data Analyst Intern – Tesla, Inc., Residential Energy | Palo Alto, CA

Jan 2026 – Aug 2026

- Engineered a production **entity resolution pipeline** for a 35K-account installer network, using fuzzy matching, indexed retrieval, and reranking to achieve **80%+ accuracy** and save **280 hours per 10K records**
- Leading development and pilot of a **Power Apps CRM** for 70+ Account Managers and Sales Ops users, replacing manual Excel workflows with a visual tool that automates daily refreshes and streamlines account management
- Built internal **GenAI workflow agents** for 100+ sales and operations users across 20 workflows, supporting email drafting, ticket intake, and documentation retrieval through Jira, Teams, Confluence, and mail integrations
- Owned executive-facing **solar launch analytics**, defining KPI logic for orders, deliveries, training compliance, and kW goal attainment while automating weekly performance updates

Technology Consulting Intern – Ernst & Young (EY) | Singapore

May 2025 – Aug 2025

- Led client-facing **UAT** for a \$13M enterprise migration, validating **10K+ records** and surfacing critical defects before release
- Automated migration validation workflows using **SQL Server**, reducing manual QA effort by **50%**
- Supported migration of legacy file storage to **Azure Blob Storage**, improving access control and cloud readiness
- Triaged defects in **Azure DevOps**, distinguishing missing vs incorrect data issues to accelerate sprint resolution

Data Analytics Fellow – The Global Career Accelerator | Remote

Aug 2024 – Dec 2024

- Analyzed **30M+ engagement records** for a Recording Academy-sponsored audience strategy project, uncovering **5x higher engagement rates** for photo-based content
- Evaluated Grammy.com site performance using bounce rate, pages/session, time on site, and **mobile traffic KPIs**, recommending continued site separation
- Designed **A/B testing analyses** with hypothesis tests to validate engagement metric differences at 95% confidence
- Modeled regional energy availability, demand, and **renewable capacity** for an Intel-sponsored sustainability project, ranking U.S. regions for data center readiness

PROJECTS

Argus | Python, Streamlit, PostgreSQL, SQLAlchemy, GitHub Actions

Jun 2026

- Built a **market intelligence platform** tracking 53 AI, semiconductor, quantum, and data center companies
- Architected a **33-table PostgreSQL data model** with automated pipelines for market data, SEC filings, earnings, news, and macroeconomic indicators
- Developed **explainable opportunity scoring** using peer-relative metrics, catalysts, thesis tracking, and historical 5D, 20D, and 60D backtests

FarmX (MHacks 2024 Winner) | Python, scikit-learn, Streamlit

Sept 2024

- Built **Random Forest models** to predict nitrogen levels and recommend suitable crops using temperature, humidity, pH, and rainfall data
- Integrated **Pandas/NumPy** preprocessing and ML models into a multi-page Streamlit app for crop and yield decision support
- Won **Best Sustainability Track** at MHacks 2024 for a decision-support prototype focused on fertilizer efficiency and soil health

Micro Foods Market (Backend) | Docker, Flask, REST APIs, SQLite, JWT

Apr 2025

- Designed a **microservices backend** with 5 Flask services for authentication, products, search, orders, and logging
- Implemented **JWT authentication**, REST APIs, SQLite persistence, and Docker Compose networking for local orchestration
- Structured service-to-service workflows for orders, product search, and logging to separate business logic across backend services

LEADERSHIP & INVOLVEMENT

SpartaHack – Co-Director for 600+ attendee student-run hackathon

International Students Association – Director of Technical Affairs, leading development of centralized affiliate web platform

Resident Assistant – Mentored and supported 80+ students in residential community