

# ASHAY KARGAONKAR

*Data Scientist / Machine Learning Engineer / Software Engineer*

## PROFESSIONAL SUMMARY

---

Software Engineer with **4+ years** of experience, including 3+ years in backend development with **.NET**, **AWS**, and database design. Skilled in migrating databases, developing scalable and **RESTful web** services, and optimizing cloud infrastructure. With a strong foundation in **data science**, data analysis, machine learning, and deep learning, I bring a **well-rounded problem-solving approach**. Passionate about AI, automation, and cloud innovations.

## EMPLOYMENT HISTORY

---

### SOFTWARE ENGINEER

*Tata Consultancy Services*

Mar 2022 - Present

*Chicago, IL*

- ♦ Migrated about **21 million** records to **AWS DynamoDB**, a **NoSQL** database, with a focus on data integrity, ensuring **zero data loss** while designing optimized table structures for efficient storage and retrieval.
- ♦ Developed high-performance **web APIs** using **C#** and **.NET**, leveraging **AWS** services and effective data modeling to improve data access and ensure system reliability.
- ♦ Collaborated on secure deployments using **CI/CD pipelines** with **GitHub** and **Docker**, working closely with testers to resolve issues and ensure a seamless user experience.

### DATA ANALYST INTERN

*Instahub LLC*

Jan 2021 - Mar 2021

*Remote*

- ♦ Analyzed **AWS RDS** sensor data with **MySQL** to identify patterns in room and device usage, uncovering key insights for optimization.
- ♦ Developed predictive models in **R** and **Python** to enhance energy efficiency, leveraging **statistical analysis** and **data visualization** using **matplotlib** and **Tableau** to uncover trends and support strategic decisions, while designing dashboards.

### DATA SCIENTIST

*Ezeelo Consumer Service PVT LTD*

Aug 2018 - Aug 2019

*Nagpur, India*

- ♦ Analyzed customer data to predict inventory needs and optimize global distribution using **prediction algorithms** and **clustering**, implementing product **recommendation models** that increased sales by **8%**.
- ♦ Leveraged **SQL** and **Python** for data normalization, improving trend analysis and insight extraction, and designed interactive **Tableau** dashboards to visualize product demand, aiding stakeholders in decision-making.

## PROJECTS

---

### CHESSGROW (PART OF THINKMOVES (ONGOING))

ThinkMoves Core, or ChessGrow, streamlines chess analysis using **computer vision** to scan score sheets for accurate digital conversion. Built with **AWS Textract** for **OCR**, a **.NET** backend, and a **TypeScript** frontend, it ensures reliable processing and cloud storage on **AWS**. Incorporating **image classification** techniques in development using **TensorFlow**, it enhances recognition accuracy. Users can analyze and share games, supporting strategic learning within the **chess community**.

### INVESTCRYPTO

InvestCrypto is a **time-series forecasting** project for cryptocurrency trends. It analyzes historical data from major cryptocurrencies using **ARCH** and **GARCH** models to capture volatility and improve prediction accuracy, offering valuable insights for data-driven investment decisions.

### BREAST CANCER CLASSIFICATION

Breast Cancer Classification is a supervised machine learning project focused on diagnosing breast cancer using clinical data. It applies **advanced analytics** and compares multiple ML algorithms to evaluate performance, achieving **85% accuracy**. The project utilized **pandas** and **NumPy** for data preprocessing, and the final models were deployed via **Flask APIs**, enabling real-time predictions and demonstrating end-to-end development from analysis to deployment.

## EDUCATION

---

### MASTER OF SCIENCE IN COMPUTER SCIENCE

*DePaul University*

Sep 2019 - Aug 2021

*Chicago, IL*

### BACHELOR OF COMPUTER ENGINEERING

*Pune University*

Jun 2013 - Jun 2018

*Pune, India*