

Arya Kadarkar

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EDUCATION

- Master of Science in Information Systems,** 12/2026 | College Park, MD, USA
University of Maryland, Robert H. Smith School of Business
- Terrapin Scholar
 - Relevant Coursework: Data Science & Predictive Analytics, Big Data & Cloud Computing, Data Processing & Analysis in Python, Data, Models & Decisions Using R, Business Process Analysis, Harnessing AI for Business, Data Visualization, Social Media & Unstructured Data Analytics, Machine Learning & Blockchain for FinTech
- Bachelor of Science in Computer Science,** 12/2024 | State College, PA, USA
Pennsylvania State University, College of Engineering
- Dean's List: Spring 2021
 - Relevant Coursework: Discrete Mathematics, Data Structures & Algorithms, Digital Design, Introduction to Data Mining, Operating Systems, Theory of Computation, Database Management Systems, Object-Oriented Programming, Web-based Applications
- Smeal College Business Fundamentals Certificate,** 05/2024 | State College, PA, USA
Pennsylvania State University, SMEAL School of Business
- Relevant Coursework: Accounting for Decision Making, Microeconomic Analysis, Finance, Supply Chain, Marketing, Management, Legal Environment of Business

WORK EXPERIENCE

- Fortune Business Insights, Market Research Intern** 03/2025 – 07/2025 | Pune, MH, India
- Authored 50+ ICT and semiconductor report descriptions, working closely with the Business Development team to align content with key market trends and client needs.
 - Collaborated with senior analysts and supported three global consultancy projects, including Asia's video-conferencing market, by conducting targeted research and contributing to strategic deliverables.
 - Shadowed CEO for one month, gaining direct exposure to strategic decision-making and business operations
- Penn State (Independent Study under Prof. Mark Gough), Research Assistant** 08/2024 – 12/2024 | State College, PA, USA
- Built and deployed Python and JavaScript scrapers to extract structured data for 1,500+ legal professionals
 - Automated multi-source data pipelines, improving data collection efficiency and consistency
- EcoStart Ventures, Business Development Intern** 05/2024 – 12/2024 | Hybrid
- Built 50+ customer profiles by analyzing company data and mapping sustainability goals to supplier solutions
 - Contributed to training datasets for an AI-based recommendation model improving supplier matching
 - Identified and reported 50+ UX and functionality issues, improving platform usability and performance

PROJECT EXPERIENCE

- Residential Real Estate AI Prediction System** 01/2026 – Present
- Developing an AI-driven system to predict residential property sale prices and timelines using large-scale county datasets
 - Processed and engineered 200+ features including historical sales, valuation metrics, and temporal indicators
 - Designed end-to-end data pipeline for cleaning, feature engineering, model training, and business insight generation
 - Evaluated model outputs to generate actionable insights for pricing strategy and market timing decisions
- Machine Learning Model for Pricing & Performance Prediction (Airbnb Dataset)** 01/2026 – 03/2026
- Built Logistic Regression, Random Forest, and XGBoost models to analyze pricing and listing performance
 - Applied feature engineering and model evaluation (ROC-AUC, accuracy) to improve prediction quality
 - Conducted A/B-style model comparisons to identify optimal approaches for business decision-making
- Quantitative Portfolio Optimization & Financial Modeling** 01/2026 – Present
- Built portfolio optimization models using Sharpe ratio, volatility, and risk-return tradeoffs
 - Conducted Monte Carlo simulations and benchmark analysis to support investment decision-making
 - Interpreted simulation results to compare strategies and recommend optimal portfolio allocations
- Chess AI Tournament System** 03/2026 – Present
- Built a tournament framework to evaluate multiple AI bots under time and rule constraints
 - Implemented game logic, validation, and performance tracking using Python
 - Designed system to simulate competitive scenarios and analyze decision-making strategies

TECHNICAL SKILLS

Python (Pandas, NumPy), Java, C++, R, MATLAB, SQL, Microsoft Excel, Power BI, Tableau, Data Visualization, Statistical Analysis, Forecasting, Financial Modeling, ChatGPT, Prompt Engineering, Data Pipelines, Web Scraping, BeautifulSoup, Database Management, MongoDB, Neo4j