Jaypal Patel

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EDUCATION

University Of Illinois at Urbana-Champaign
Bachelor of Science in Information Science + Data Science   Graduation: May 2026
Minor in Econometrics   GPA: 3.9/4.00
AXIS Risk Management Academy at Gies College of Business, Derivatives & Trading Academy at Gies College of Business

RELEVANT CLASSES

CS 124: An Introduction to Computer Science, **CS 128**: Introduction to Computer Science 2, **CS 277**: Algorithms & Data Structures for Data Science, **MATH 227**: Linear Algebra for Data Science, **STAT 107**: Data Science Discovery, **STAT 207**: Data Science Exploration, **IS 206**: Database Concepts & Applications, **IS 327**: Concepts of Machine Learning, **IS 380**: Consulting for Information Professionals, **IS 407**: Data Science with R, **ECON 202**: Economics Statistics 1, **ECON 302**: Inter Microeconomic Theory, **ECON 203**: Economics Statistics 2, **CS 307**: Modeling & Learning in Data Science, **IS 204**: Research Design, **FIN 393**: Risk Management Academy, **FIN 412:** Options & Futures Market, **IS 467:** Ethics & Policy for Data Science.

CERTIFICATIONS

CFA Institute: Chartered Financial Analyst (CFA Level 1)   Champaign, IL
                                                                                               Feb 2025

WORK & RELEVANT EXPERIENCES

The Grainger College of Engineering (ECE)   Champaign, IL
Research Assistant   Aug 2023 – Mar 2024

- Aimed to develop fully operational and autonomous electrosurgical equipment.
- Recorded vast amount of data. Followed by conclusive and analytical exploration of data using hierarchical data format files (HDF5).
- Developed mode-specific cyber-oriented bio tissue response models by accurately characterizing heat transfer mechanisms in different modes (cut, coagulation). Improved model predictions through iterative refinement using laboratory measurements.
- Worked on enhancing model accuracy across spatiotemporal ranges by integrating fundamental models with real-time AI-driven parameterizations, while conducting live porcine trials to collect data on five tissue types: subcutaneous, muscle, liver, lung, and brain.
- Primarily, live feed of visual and infrared images was employed by the model to train and then automate the process.
- Evaluated and refined the performance of the newly designed autonomous electrosurgical equipment through collecting data from its application to live tissue types indicated above.

Engineering IT Shared Services, The Grainger College of Engineering   Champaign, IL
L1 Consultant   Jan 2023 – Jan 2024

- Assisted in the implementation of a cloud-based network that improved system scalability and flexibility.
- Researched and recommended new technologies to improve system performance and user experience.
- Helped develop a user-friendly IT support system that reduced average ticket/incident resolving time.
- Installed and configured new hardware, software, and networks, resulting in improved system performance and reliability.
- Implemented a user access control system that improved system security and prevented unauthorized access.
- Installed and managed virtual machines

L2 Consultant   Jan 2024 – Present

- Managed AD and looked after security and access control. Implemented and integrated CrowdStrike Falcon into the existing network.
- Lead projects, initiatives, and working groups to implement complex IT architectures and process changes.
- Wrote, maintained, and reviewed detailed documentation related to server services.
- Actively engaged with campus instructional technology activities such as Coursera, Compass 2G, Kaltura, CITES, and CITL.
- Implemented changes to the MECM.

Illinois Computer Science   Champaign, IL
Course Assistant (CS 124)   Jan 2023 – Jan 2024

- Collaborated with colleagues to ensure course objectives were met and students were successful.
- Assisted the course instructor in conducting lab sessions, grading assignments, and providing one-on-one assistance to students in understanding programming concepts and assignments.
- Facilitated doubt-solving for Java programming language with a deep understanding of object-oriented principles, data structures, algorithms, design patterns and software development concepts.

RELEVANT SKILLS & INTERESTS

Python AI/ML Libraries: Pandas, NumPy, Matplotlib, Scikit-Learn, PyTorch, TensorFlow, SciPy, Seaborn, Plotly, Statsmodels, Keras
Other Relevant Skills: Java, Python, R, Data Structures, Android Studio, Oracle Databases, MySQL, Data Visualization, Data Wrangling and Exploration, Microsoft Excel, Microsoft Office, Data Exploration, Statistical Analysis, Feature Engineering.
Interests: Travelling, Golfing, Reading