

Jasna Budhathoki

jb5079@columbia.edu

<https://github.com/Jasna-Budhathoki> | www.linkedin.com/in/jasna-budhathoki/

EDUCATION

Columbia University

New York, NY

M.S. in Computer Science, Machine Learning Track

Dec 2025

- Relevant Courses: Neural Networks Deep Learning, Machine Learning, Artificial Intelligence, Databases

Mount Holyoke College

South Hadley, MA

B.A. in Computer Science, Minor in Statistics and Nexus in Data Science, GPA: 3.99

May 2023

- Relevant Courses: Natural Language Processing, Software Development, Operating Systems, Algorithms
- Honors and Awards:
Phi Beta Kappa (America's most prestigious honor society) | magna cum laude | Sarah Williston Scholar
Mu Sigma Rho Society (National Honor Society for Statistics) | Gina Jacobsen Prize in Mathematics

SKILLS

- **Languages:** Python, Java, R, Matlab, SQL, HTML, C
- **Frameworks/Libraries:** PyTorch, TensorFlow, Keras, NLTK, Sklearn, Pandas, NumPy, Flask, LangChain, LangGraph, Pydantic, RAG, Agentic RAG
- **Development Platforms/Cloud Services:** Linux, Mobile Development, REST APIs, Git, GCP, AWS, Docker
- **ML Skills:** Computer Vision, Deep Learning, Reinforcement Learning, Transformers, Data Wrangling

WORK EXPERIENCE

Amazon Web Services AI

Seattle, WA

Software Developer (Internship)

Jun 2025 – Aug 2025

- Engineer customizable generative AI outputs in Bedrock Data Automation to seamlessly extract structured, meaningful insights from audio files, including entire recordings, segments, and speaker-level data.
- Collaborate cross-functionally with the Machine Learning and Responsible AI teams to align engineering solutions with research insights and fairness/safety requirements, ensuring smooth deployment of new features.

Origin Investments

Chicago, IL

Software Engineer (Internship)

Feb 2023 - Aug 2024

- Trained a deep learning model to forecast rent, occupancy, and concessions using 3D spatial and temporal data.
- Achieved 98.33% accuracy in forecasting year-over-year Consumer Price Index (CPI) direction by integrating geospatial data into ensemble regression and time series models.
- Leveraged CatBoost to predict loan default probabilities, achieving a Recall of 0.96 and F1 Score of 0.98.
- Developed a Retrieval Augmented Generation (RAG) app by employing LangChain and GPT-4o to address investor queries.
- Built a chatbot by fine-tuning GPT-3.5 Turbo and Llama 2 models with 900+ prompt-completion pairs.

Xuno

Ellensburg, WA

Data Science Consultant (Contract)

Apr 2024 - Jul 2024

- Engineered a scalable data lake ETL pipeline for data ingestion, processing, analysis and visualization to analyze customer conversion rates (AWS).
- Mentored a data intern, providing guidance in data querying (AWS Athena) and visualizations (QuickSight).

Omdena

Palo Alto, CA

Product Manager (Apprenticeship)

Jun 2023 - Oct 2023

- Constructed an AI-assisted scoring model in collaboration with 60 ML/AI engineers to determine representation of women, youth and marginalized groups in news media (NER and sentiment analysis).
- Collaborated with 12 domain experts to streamline end-to-end data pipeline and ML models, and fine-tune LLMs.
- Co-planned project outlining various stages, milestones and tasks.

Kathmandu Living Labs

Kathmandu, NP

Software Engineer (Internship)

Jun 2022 - Aug 2022

- Improved a text to speech ML model (TensorFlow) to synthesize a natural sounding Nepali speech for a cloud based geospatial service called Baato.
- Configured Flask REST APIs for geolocation services, including encoding and decoding latitude-longitude pairs to enhance navigation and ride-sharing application functionality.