

Arindam Shiva Tripathi

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EDUCATION

University of Maryland (UMD)

Master of Science in Human-Computer Interaction (HCIM)

- 4.0 GPA

- Relevant Coursework: Transforming Unstructured Content with AI, Programming Human-Centered Interfaces

College Park, MD, USA

Aug 2025 – May 2027 (Expected)

National University of Singapore (NUS)

Bachelor of Engineering in Computer Engineering, Minor in Business Management

- Concentration in Interactive Digital Media; graduated with honors

Singapore

Aug 2019 – Jul 2023

EXPERIENCE

L'Oréal Singapore

Data Analytics Specialist (Full-Time)

- Developed and deployed ML-backed promotion planning tools used by 200+ planners across 10+ APAC markets, contributing to a 24% improvement in promotional efficiency
- Implemented core metric calculations and standardized reporting logic across markets to ensure consistent decision-making workflows
- Monitored system usage and performance metrics to refine planning features, increasing system adoption by 40%

Enterprise Architecture Intern

- Built Power BI dashboards to track enterprise application usage across APAC, reducing data access time by 90%
- Reorganized application metadata and launched a centralized Power Platform storefront used by 50+ teams to improve tool discovery

SP Digital

Full Stack Developer Intern

- Translated Figma designs into responsive webpages using reusable frontend components for the customer-facing app
- Debugged and resolved issues in an internal Golang portal, fixing state handling and request flow errors across frontend and backend components

PROJECTS

Music & Lyrics Transcription System — Python, React, SpeechBrain, Spleeter

Oct 2022 – Nov 2022

- Engineered an end-to-end audio processing pipeline to extract lyrical and melodic content from uploaded audio
- Evaluated transcription performance using Word Error Rate and F1 metrics, identifying reliability degradation under specific conditions
- Designed a React-based frontend to present model outputs in a clearly understandable way

Media Framing & Sentiment Transformation Pipeline — Python, NLP, LLMs

Mar 2026 – Present

- Building a transformation pipeline to convert unstructured data into structured sentiment and framing representations using classical NLP methods and LLM-based approaches
- Evaluating feature-based models and LLM outputs for robustness, bias, and statistical significance

AI-Assisted Portfolio Platform — React, JavaScript, HTML/CSS, Codex

Dec 2025 – Present

- Built a personal website using AI coding assistants to accelerate development, restructuring generated code into reusable components and a scalable architecture
- Refactored duplicated navigation logic and resolved gradient rendering issues, improving consistency and maintainability across responsive layouts

Payment Flow Optimization — A/B Evaluation — Qualtrics, MTurk, MATLAB

Feb 2023 – Mar 2023

- Designed a controlled experiment comparing navigation layout variants using task completion time and error rate as performance metrics
- Applied statistical analysis to identify significant usability differences and inform data-driven interface redesign recommendations

SKILLS

AI & ML Systems: Python, PyTorch, TensorFlow, scikit-learn, spaCy, HuggingFace Transformers, BERTopic, OpenAI APIs, SpeechBrain, Spleeter, model evaluation (statistical testing)

Programming & Engineering: Python, JavaScript, React, Flutter, C#, SQL, modular architecture

Data & Infrastructure: pandas, Jupyter Notebook, Docker, Git, Google Cloud (Vertex AI), Power BI

Certification: Google Cloud Certified – Cloud Digital Leader (Dec 2023)