

Alina Du

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EDUCATION

Columbia University

B.S. Computer Science, Financial Engineering and Math Minor

New York, NY

- **3.9/4.0 GPA**
- Coursework: Software Quality and Design, Data Structures, Machine Learning, Optimization
- Activities: Intro to Python (TA), SWE, WiCS, Columbia Lioness Quantitative, Rewriting the Code

SKILLS & AWARDS

Languages: Python, Java, TypeScript, SQL, HTML

ML/Data: PyTorch, Scikit-learn, Hugging Face, NumPy, Pandas, SciPy

Frameworks: React/React Native, Next.js, FastAPI, LangChain, LangGraph

Infra: AWS (EC2), GCP, Vercel, PostgreSQL, MongoDB, Git

Awards: Jane Street WiSE (top 60); 2x Hackathon Winner

Math: MIT Math Prize for Girls; 2x AIME Qualifier; Waterloo National Math Scholarship (15 recipients)

EXPERIENCE

Machine Learning Research Intern

May 2026 — Present

Columbia University

New York, NY

- Presented [Research Poster](#) at Jane Street and Columbia Research Fair; co-authored paper in progress
- Designed an adaptive risk-thresholding policy to allocate a fixed verification budget toward the highest-risk reasoning steps, improving reliability from 0.918 to 0.965 across 50 held-out trees
- Benchmarked 7 LLMs on 5,000+ claims and found all were overconfident on their own errors, motivating structure-based over confidence-based verification

Research Assistant – Data Engineering

Sep 2026 – Present

Columbia University

New York, NY

- Help design and build the lab's AI experiment platform (user interface and study prompts)
- Develop Python data pipelines to clean, structure, and analyze experimental and observational data

Software Engineer Intern

Mar 2026 — Jun 2026

Intelligence Cubed

New York, NY

- Designed and implemented an invite-code access-control system gating the deployment flow, enforced on both frontend and backend to prevent unauthorized provisioning
- Designed and implemented an Anthropic-compatible adapter layer for Cloudflare-hosted Kimi models, enabling integration across 5+ frontend, backend, and deployment services
- Built multi-cloud deployment support (AWS EC2, GCP) with provisioning, monitoring, and status tracking, including access controls for user-provisioned infrastructure

Software Engineer Intern

Aug 2025 — Mar 2026

MeloMed – Health Tech Startup

New York, NY

- Built React Native interfaces delivering sentiment-driven recommendations to 1,200+ users
- Reduced infrastructure costs by 23% through serverless AWS deployment and caching optimizations
- Improved query latency through PostgreSQL indexing and database performance tuning

PROJECTS

Hack the Heart | Python/FastAPI, Next.js, OpenAI/Anthropic API, MongoDB, pytest

- Built a 4-agent LLM pipeline that profiles two users and simulates a date to score compatibility
- Ran rule-based NLP (VADER, hedging) on full chat histories; LLM reads the newest 10K messages
- Made 10-turn dates resumable by upserting each turn on (date ID, turn index) in MongoDB, making retries idempotent
- Built multi-source ingestion with message-ID deduplication and parse-time discard of all third-party text, validated by 128 pytest cases