# Amy Zhang

Data Analyst & Creative Technologist

Data professional working at the intersection of AI/ML development, data visualization, and research-driven design. Skilled in Python, SQL, and Tableau with experience prototyping AI tools (RAG, fine-tuning, Streamlit) and translating complex research into interactive applications. Brings an interdisciplinary background in architecture, ethnography, and media to uncover insights and design data-driven solutions.

amy.appearouette@gmail.com | www.linkedin.com/in/azhang2262

Data Portfolio: amyzhang-commits.github.io

#### **TECHNICAL SKILLS**

AI/ML Development: Retrieval-Augmented Generation, Fine-tuning (LLMs & ASR), Streamlit (app prototyping)

Programming & Analysis: Python, SQL, Jupyter Notebooks, Statistical Analysis, Web Scraping

Visualization & Reporting: Tableau, Excel, GitHub

Design & Media: DaVinci Resolve, Reaper (audio editing), Notion

Research Methods: Ethnographic fieldwork, Spatial data analysis, Historical research

Languages: Conversational in French, Portuguese, Mandarin, Spanish

### PROFESSIONAL CERTIFICATIONS

Data Analytics Certification (Machine Learning Specialization) | CareerFoundry

Aug 2024 - Aug 2025

- Developed time-based customer segments and promotion strategies for Instacart based on customer novelty openness
- Built anomaly detection model for U.S. power plant water usage reporting after wrangling public Energy Information Agency datasets
- Portfolio of Projects covering business intelligence, public policy, and machine learning

# AI Builders Bootcamp | Maven (led by Shawhin Talebi)

Aug 2025 - Sep 2025

- Peer Group Leader, supporting cohort in AI project development
- Built an offline AI financial assistant ('Till-Bot') and prototyped an AI architectural design partner using RAG and LLM chain-of-reasoning
- 'Till-Bot' demo link (full portfolio forthcoming)

# **EDUCATION**

# M.Phil Architecture Theory & History Columbia University GSAPP M.A. Ethnomusicology 2012 - 2019 2010 - 2012

M.A. Ethnomusicology
Columbia University

**B.A. Anthropology** 2006 - 2010

University of North Carolina at Chapel Hill

Robertson Scholar

## **TECH EXPERIENCE**

#### Technologist & Data Consultant | Appearouette Studio

ul 2025 - Presen

- Developed AI- and data-driven project proposals and prototypes for creative and mission-driven organizations, including building climate optimization for a NYC dance center and AI-assisted archival workflows for a design firm
- Authored detailed business requirements and proof-of-concept analyses, translating organizational needs into technical solutions and actionable workflows
- Conducting applied research and strategic development for pAIrtree, an AI-driven EdTech project focused on precollege portfolio-building and mathematics education; producing white papers and prototypes to inform curriculum design and technology integration
- www.appearouette.com

#### Digital Learning Specialist | Science & Engineering Library, Columbia University

2014 - 2017

• Designed Arduino-based interactive systems; managed emerging technology programming for students (3D printing; microcontrollers; VR)

# **WORK EXPERIENCE**

#### **Graduate Research Fellow** | Columbia University

2013 - 2019

- Mellon-funded initiative: Sawyer Seminar for Global Language Justice; facilitated interdisciplinary research teams and moderated panel discussions
- Led graduate seminars across 7 courses in 2 departments; managed cohorts of 15-25 students
- Conducted ethnographic research on technology adoption in architecture design; co-designed accessibility methodology for public spaces

## Research Assistant | Natural Materials Lab, Columbia University

2021 - 2022

• Co-authored "Can We Eat Buildings? Reflections on Edible Earth Architecture" published in ArchDaily

#### Freelance Musician & Videographer | Brooklyn, NY

2022 - Sep 2025

- Dance Accompanist for Mark Morris Dance School, Barnard College, and New York Theatre Ballet
- Music Educator: Concept Music School (2021-2023); private studio (2024-July 2025)
- Community Workshops: Lunar New Year recital w/Immigrant Social Services, Inc; vocal workshops
- Video work includes sound design for The Architecture Lobby (Graham Foundation documentary) and videography for Brooklyn Motion Capture