## Max Mendoza

Los Angeles, CA, United States, 562-237-4198, max.k.mendoza17@gmail.com

PERSONAL WEBSITE	https://maximusmendoza.github.io			
PROFILE	Experienced Research Assistant with 5+ years of programming expertise, specializing in ML and data analysis. Currently pursing a duel Bachelor's and Master's in Math and Computer Science at UCLA, looking to contribute to the field of AI Safety.			
EDUCATION				
Sep 2024 — Jun 2027	Bachelor of Science in Mathematics of Computation, University of California, Los Angeles			
Aug 2020 — May 2024	Diploma with Honors, Cambridge AICE Diploma, Troy High School			
COURSEWORK	Data Structures an Algorithms (UCLA), Linear Algebra (UCLA), Probability Theory and Statistics (UCLA), Machine Learning (Coursera), Reinforcement Leaning (AI Safety at UCLA), Multivariable Calculus (CSUF), Linear Differential Equations (CSUF), Category Theory (UCLA Mathematics DRP)			
EXPERIENCE				
Jun 2023 — Sep 2023	Research Assistant, Harvard-Smithsonian Center for Astrophysics			
	Analyzed spectra data from 700,000+ supermassive black holes, using dimensionality reduction technique (PCA, UMAP, Autoencoders, etc.) to develop a novel classification system for active galactic nuclei.			
Mar 2022 — Jul 2022	Research Assistant, Harriton Research Lab			
	Leveraged Computational Biology methods with R to analyze several genome wide association studies of up to 115,000 individuals. Established causal links between 29 metabolites and Multiple Sclerosis.			
PROJECTS				
Jan 2025 — Present	HANA Architecture			
	Proposed Holistic Adaptive Neural Architecture (HANA), a modular framework designed to handle diverse tasks through a single, unified system. It features an encoder for broad input representations, a pool of specialized sub-networks (modules) that can be dynamically selected or combined, and a meta-controller that learns gating decisions based on the context. (Current work in progress)			
Oct 2023 — Mar 2024	Handwriting Generator			
	Developed a handwriting generator that converts digital text into lifelike handwritten images using deep learning. The system employs an RNN with LSTM heads to generate a sequence of pen strokes.			
SKILLS	Python	Experienced	Git	Skillful
	C++	Skillful	PyTorch	Experienced
	Java	Skillful	Data Analysis	Skillful
	R	Skillful	Language Models	Experienced
	LaTex	Experienced	Deep Learning	Experienced
PERSONAL ENDEAVORS				
Aug 2019 — Present	Production Assistant			
	Help to facilitate the needs of various departments on set in an expeditious and efficient manner. Occasionally supervise newer PAs as they become acclimated to the hectic, fast-paced environment found on most film sets.			
Sep 2021 — Jun 2024	Educated Finannce			
	Co-founded nonprofit focused on improving financial literacy among youth, Led 18-member team providing 1:1 tutoring & resources for people in 7 countries, and raised \$2000 as treasurer.			

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