

JAXON BAILEY

SOFTWARE ENGINEER, NYC

WEBSITE hi-jaxon.github.io
LINKEDIN linkedin.com/in/jaxonbailey
GITHUB github.com/hi-jaxon
EMAIL jaxonbailey01@gmail.com
PHONE +1 737 230 2137

SKILLS

Java	<div><div></div></div>	Bootstrap	<div><div></div></div>	English	<div><div></div></div>
Python	<div><div></div></div>	React.js	<div><div></div></div>	Japanese	<div><div></div></div>
Javascript	<div><div></div></div>	jQuery	<div><div></div></div>	Spanish	<div><div></div></div>
HTML/CSS	<div><div></div></div>	Django	<div><div></div></div>		
Matlab	<div><div></div></div>	Express/Node.js	<div><div></div></div>		

EDUCATION

UNIVERSITY OF PENNSYLVANIA , School of Engineering and Applied Science	2022 – Now
Master of Computer Science (MCIT)	
UNIVERSITY OF TEXAS AT AUSTIN , Cockrell School of Engineering	2015 – 2018
Bachelor of Science, Mechanical Engineering	

PROJECTS

Q-LEARNING AGENT	2023
Designed an AI agent that learns through interactions with its environment via trial & error. Navigated a stochastic grid world, avoiding pitfalls to reach a goal terminal. The same agent also attained a near-perfect win rate in Pacman by exploiting a weighted feature function.	
AI DOMINO PLAYER	2023
Developed an artificially intelligent player for a one-on-one dominoes game in Python. Implemented a game tree and minimax decision rules to search for the best plays.	
OBSTACLE NAVIGATION PROGRAM	2023
Implemented a Python program to solve the problem of navigation on a two-dimensional grid with obstacles. Employed A* search to improve on breadth-first search.	
FLU TWEET ANALYSIS	2023
Designed a Java program using N-tier architecture to analyze Twitter data, look for tweets regarding occurrences of the flu, and estimate where the disease is affecting people. Used JSON.simple to read JSON data. Applied Singleton and Factory design patterns.	
WAAVES , Duvauchelle Labs, University of Texas	2018
Co-developed a Matlab program that parses and processes audio data for animal research labs. Implemented a GUI, greatly improving ease of use and increasing program stability.	

WORK

ENGLISH LANGUAGE COACH , Self-Employed, Remote	2018 – Now
Coached EFL learners of all ages from 30+ countries and assisted throughout life processes like job interviews, college admissions, and the cultural assimilation of immigrants to the US.	
LEAD TEACHER , Human Academy, Tokyo, Japan	2021 – 2022
Developed and taught original English immersion curriculum for a prestigious private JHS in the Tokyo area. Trained teachers and served as liaison between school and management.	
RESEARCH ASSISTANT , Duvauchelle Labs, Austin, Texas	2017 – 2021
Co-developed an audio processing program for use in animal research labs. Automated data aggregation/file management tasks with Python, saving hundreds of work hours.	