Lewis Arnsten

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EDUCATION

University of Chicago | Chicago | BA Computer Science

June 2023

Specialization in Machine Learning; completed second major in English Language & Lit. **GPA:** 3.67/4.00 *Sel. Courses:* Math Foundations of Machine Learning, Intro to Neural Networks, Intro to Computer Vision, Mobile Computing

TECHNICAL SKILLS

Languages: Python, C, C++, JavaScript, TypeScript, Solidity, Swift, HTML, CSS, SQL

Frameworks: PyTorch, SciPy, PIL, Pandas, Numpy, Web3.js, React.js | Misc. Software: Git, Unix

PROFESSIONAL EXPERIENCE

Jason Salavon Studio | Chicago

Feb 2021 - Present

Lead Developer

- Created TODEM [latentculture.com/todem], a large-scale mosaic GIF artwork (5.8B pixels) built using cutting-edge generative AI and published using the Ethereum ERC-721 standard
- Lead product development from end-to-end, working collaboratively with faculty director
- Served as programming backbone for all project aspects, including backend, frontend, rendering, data management, AI, blockchain, and security
- Created and iteratively improved UI and UX for TODEM
- Designed and programmed the rendering pipeline for TODEM; designed workflow for rendering
 "gigascale" animations involving complex data pipelines, multiprocessing, and the implementation of
 generative AI–focusing on conditional image synthesis
- Built blockchain infrastructure; drafted, tested, optimized, and oversaw publication of TODEM contract [contract link] netting >\$100,000 in total sales
- Developed deep experience addressing problems from across the tech stack

NY Stem Cell Foundation | New York

June 2017 – August 2019

Automation Engineering Intern

- Programmed methods, modules, and workflows for pipetting robots over three consecutive summers
- Completed training operating the Opentrons OT-2 and epMotion liquid handling robots
- Integrated machine learning and computer vision algorithms into procedures for quality control; created a Raspberry Pi (with camera) attachment for validating robotic movements on the OT-2
- Contributed to weekly meetings with progress updates and presented to the entire foundation at the end of each summer
- Developed deep experience building with Python APIs and optimizing precision settings

TEACHING & LEADERSHIP

Coding4Youth | Remote

June – September 2020

Instructor

- Taught groups of 5-10 children ages 8-16 in Javascript, HTML, CSS, and Minecraft Lua
- Adapted curricular materials and assessed/addressed diverse learning objectives
- Liaised with parents and answered questions about student progress toward goal

Ski Butternut | Great Barrington, MA | Instructor

December 2015 - March 2019

- Taught beginner and intermediate skiing to students ages 4-8 on a 50 member staff
- Completed training on instruction and basic safety