Isaac Monheit

[Portfolio](#) [GitHub](#) [LinkedIn](#)

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EDUCATION

Tufts University　　　　　　　　　　　　　　　　　　　　　　　　　Medford, MA

Summa Cum Laude, GPA: 3.87; BA in Computer Science, minor in Music, Sound, and Culture　　*Aug 2021 - Dec 2024*

- **Coursework**: Data Structures, Algorithms, Computer Vision, Machine Structure and Assembly-Language Programming, Files and Databases, Cybersecurity, Linear Algebra, Discrete Mathematics, Digital Humanities, Security, Computation Theory, Electronic Musical Instrument Design
- **Clubs**: JumboCode*(coding for non-profits)*, JumboSec*(cybersecurity)*, Music Production, JumboSkate*(roller sports)*
- **TA Work**: Programming Languages TA*(fall 2023, fall 2024)*

SKILLS

Languages: C/C++, Python, JavaScript/TypeScript, HTML/CSS, Bash, SQL, Java, Groovy, Functional Programming
Technologies: Touchdesigner, Git, React/React Native, Node.js, Jira, AWS, Jenkins, Valgrind, Natural Language Toolkit, GStreamer, Logic Pro, Ableton Live, Final Cut Pro

EXPERIENCE

Systems Administrator　　　　　　　　　　　　　　　　　　　　　　　　　Remote

Copyright Clearance Center　　　　　　　　　　　　　　　　　　　*Nov 2024 - Present*

- Wrote and maintained Python and Groovy scripts to automate administrative tasks in Jira and Confluence
- Audited, reformatted, and organized system files and user data for improved workflow across departments
- Tools used: Jira, AWS, Jenkins, Git, Confluence, ScriptRunner

Lead Software Engineer　　　　　　　　　　　　　　　　　　　　　　Cambridge, MA

Aerial Infrared Systems　　　　　　　　　　　　　　　　　　　　*Sep 2023 - Aug 2024*

- Engineered a real-time video stream pipeline between drone and ground station using GStreamer with C++, ensuring efficient transmission and low latency
- Developed a novel 16-bit depth infrared video compression algorithm in order to efficiently transmit large videos while maintaining the quality necessary to accurately preform precise computer vision tasks on them
- Optimized a USB proxy in C++ to manipulate the PTP data stream from a Sony Alpha camera

Computer Science Instructor　　　　　　　　　　　　　　　　　　　Cambridge, MA

iD Tech Camps at MIT　　　　　　　　　　　　　　　　　　　　　*Jun 2023 - Aug 2023*

- Taught Python/AI/ML to 100+ 9-18 year-olds, with a focus on developing the fundamentals behind object-oriented programming and creative game design

Autism Smiles Tablet Application　　　　　　　　　　　　　　　　　Somerville, MA

JumboCode　　　　　　　　　　　　　　　　　　　　　　　　*Sep 2022 - May 2023*

- Developed an educational and motivational tool to help desensitize children with autism spectrum disorder to the dental office experience, addressing all sensory stimulation
- Designed a cohesive tablet application with pages that flow together well using JavaScript, React Native, Node.js, HTML, CSS, and Git

ART + TECHNOLOGY

- **Digital Reach**: 8,500,000+ total views, 29,000+ followers on interdisciplinary performance content (primarily Touchdesigner) across [Instagram](#) and [TikTok](#)
- **Talks**: *Kinetic Synesthesia* ([DATFEST](#), Apr 2025), ([Re:Wired Festival](#), May 2025)
- **Shows**: *Internet of Strings* (NYC Resistor Interactive Show, June 2025), *Visions of Excess* (Toronto, May 2025)
- **Performances**: [*Melodies From the Mind*](#) (Senior Capstone Recital, Dec 2024)