Jack Burkhardt

mail@jackburkhardt.com (312) 478-9592

LinkedIn: /in/jack-burkhardt/

Personal Website/Portfolio: https://jackburkhardt.com

EDUCATION

Northwestern University, Evanston, IL

MS, Computer Science, Expected June 2024

BA, Computer Science, Expected June 2024

- Winner, 2022 Kaplan Writing Prize
- Finalist, Fletcher Prize for Rising Undergraduate Research Star
- Current GPA: 3.7 / 4.00 Dean's List student (as of Fall 2021)

EXPERIENCE

Overture Games, Chicago, IL

Software Development Engineer, June 2022 - Present

- Developed a music practice game with extensive systems for sandbox level editing, MIDI-based level generation, and audio signal processing
- Wrote backend REST server for ingesting player metrics using Python, Flask, and MariaDB/MySQL
- Drafted detailed technical design for the above systems, pitched them to team, then iterated based on feedback
- Conducted interviews with 100+ music teachers, students, and parents to inform product design

Project KeyWave, Remote, USA

Lead Programmer, June 2022 - Sept 2022

- Built an educational game integrating visual novel, job simulator, and roleplaying systems with emphasis on modularity using JSON serialization
- Directed implementation of art, sound, and writing in Unity through direct coordination with designers
- Developed custom tooling allowing other designers to add game content 40% faster than before

Mayfest Productions, Evanston, IL

Producer, Sept 2021 - Present

- Planned and executed Dillo Day music festival with 10,000+ attendees and 80+ crew members
- Managed a mainstage artist and coordinated with their agents, technical, and PR teams pre-event and day-of
- Created relationships and contracts with external vendors and oversaw their work during the event

Northwestern University, Evanston, IL

Undergrad Teaching Assistant, March 2022 - Present

- Guided 300+ students seeking help with programming assignments or understanding course concepts
- Challenged students to improve their project design through playtesting and technical mentorship
- Received the 2022 Barris Teaching Award in recognition of my leadership and initiative

Undergrad Research Aide, June 2021 - June 2022

- Built immersive VR art experiences as a lead programmer using Unity3D, Wwise, and SteamVR
- Successfully led team to increase documentation, utilize version control, and improve code quality
- Presented publicly at prestigious international conferences such as ISEA2022 and SIGGRAPH2022

TECHNICAL SKILLS

- Programming Languages: C#, Java, C++, C, Python, SQL, DSSL2 & Racket
- Game Engines: Unity3D/2D, Unreal Engine, Source, Construct2
- Adobe Software: Premiere Pro, Photoshop, InDesign, After Effects, Lightroom
- Productivity: Microsoft Office, G Suite, Jira, Agile/Scrum Development, Trello, Confluence

CONFERENCES & EXHIBITIONS

- 2022 <u>VastWaste VR Based Art Installation</u>, 20th Piksel Festival, Bergen, NO
- 2022 <u>VastWaste VR Based Art Installation</u>, 27th International Symposium of Electronic Art, Barcelona, ES
- 2022 VastWaste VR Based Art Installation, SIGGRAPH 2022 Art Gallery, Vancouver, BC
- 2022 <u>GoodAsNU: A Community-Based Approach to Eliminating E-Waste Through Self-Repair</u>, Northwestern Undergraduate Research Expo, Evanston, IL