

Jack Burkhardt

mail@jackburkhardt.com (312) 478-9592

LinkedIn:
[/in/jack-burkhardt/](https://www.linkedin.com/in/jack-burkhardt/)

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
- Current GPA: 3.65 / 4.00

EXPERIENCE

Overture Games, Chicago, IL

Lead Systems Engineer, June 2022 – Present

- Developed music practice game [Intervallic](#) which reduces burnout among young music students
- Learned new skills quickly to address current product needs -- developed gameplay, level editor, platform integration (Steam, iOS), player metrics (AWS), audio & pitch detection (FMOD), internal tooling, monetization
- Drafted detailed technical design for the above systems, pitched them to team, then iterated based on feedback
- Took initiative to onboard new developers, providing mentorship, encouragement, and code review

NASA, Wallops Island, VA

Flight Safety Tool Programming Intern, June 2023 – Aug 2023

- Validated a mission-critical safety analysis tool through unit tests, numerical analysis, and previous mission data
- Communicated constantly across Engineering, Safety, and Program offices to best accommodate each team's needs
- Rapidly learned and built upon a 20 year old & 15k line C++ codebase by drawing program flow and debugging

Project KeyWave (acquired by [SimCase](#)), Remote, USA

Lead Programmer, June 2022 – Sept 2022

- Built an educational game integrating modular visual novel, job simulator, and roleplaying systems using component-based architecture and JSON serialization
- Directed implementation of art, sound, and writing in Unity through direct coordination with respective designers
- Developed custom tools allowing designers and other non-programmers to add content 40% faster than manually

Mayfest Productions, Evanston, IL

Producer, Sept 2021 – Present

- Planned and executed [Dillo Day](#) music festival with 12,000+ attendees, 100+ crew members, and 14 artists
- Managed a mainstage artist and coordinated with their agents, technical, and PR teams pre-event and day-of
- Created contracts and relationships with external vendors and oversaw their work during the event

Northwestern University, Evanston, IL

Undergrad Research Aide, June 2021 – June 2022

- Completed [VastWaste](#), an immersive Virtual Reality art experience, using Unity3D, Wwise, and SteamVR
- Successfully pushed for increased documentation and version control to improve and streamline development
- Presented work publicly at prestigious international exhibitions including [ISEA2022](#) and [SIGGRAPH2022](#)

TECHNICAL SKILLS

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

RELEVANT COURSEWORK & TOPICS

- Operating Systems: *Wrote kernel code, drivers, and schedulers for UNIX-like operating systems*
- Networking: *Built web servers and clients, also implemented TCP, flow control, and IP routing*

COURSES AS TEACHING ASSISTANT

- **CS 376:** Game Design & Development
- **CS 377:** Game Development Studio
- **CS 330:** Human-Computer Interaction
- **CS 396:** AI & Experimental Narrative
- **RTVF 376:** Filmmaking w/ Unreal Engine