# Colin Findley

New York, NY | 203-505-8963 | colinfindley2@gmail.com | linkedin.com/in/colinfindley2

## **EDUCATION**

**Depaul University** Chicago, IL

M.S., Computer Science | GPA: 3.85/4.0 August 2024

University of Chicago Chicago, IL

B.A. Psychology | GPA: 3.45/4.0

Honors Included: The Dean's List (2013-2018) June 2018

## WORK EXPERIENCE

## Center of Social and Cognitive Neuroscience at the University of Chicago

Chicago, IL

Research Software Engineer

Oct 2017 - Dec 2022

- Created and implemented complex online psychology experiments using JavaScript and HTML/CSS, engaging over 2,000 participants remotely during the COVID-19 pandemic when lockdowns restricted in-person research
- Designed intuitive user interfaces for psychology experiments, such as word clustering tasks, where participant interactions were captured and codified, with some data being analyzed and published as statistically significant findings
- Developed a SQL-based framework to streamline data capture, improving data accessibility for the research team and significantly reducing the need for data wrangling
- Developed the software systems that continue to enable ongoing experiments in the lab, leading to my co-authoring and publishing two research papers on musical cognition in the APA-accredited journal Psychology of Aesthetics, Creativity, and the Arts

Silver Hill Hospital New Canaan, CT

Psychiatric Technician Sept 2018 - Apr 2020

- Led and facilitated multiple weekly therapy groups, providing structured support and guidance to patients, while intervening in crisis situations to de-escalate conflicts and ensure patient safety
- Worked closely with multidisciplinary care teams to develop and implement individualized treatment plans, ensuring patients received personalized care that supported their recovery and addressed their unique needs

## SOFTWARE DEVELOPMENT PROJECTS

See Portfolio Here: colinfindley.github.io/Portfolio-Website/

## Game Engine

- Designed and developed a video game engine from scratch using C++, recreating the classic game Space Invaders
- Built comprehensive libraries for math, animation, timing, file systems, and mesh handling
- Implemented Object-Oriented design patterns such as Singleton, Composite, Factory, Command, and Proxy, leading to a more maintainable and efficient codebase
- Improved performance and efficiency by optimizing data structures for improved spatial locality, utilizing SIMD instructions for parallel processing, and enhancing the Windows operating system with custom memory management

#### **Chrome Extension**

- Developed a Google Chrome extension using React to manage browser tabs, providing features for bookmarking, rearranging, and closing tabs directly from the extension
- Implemented tab tracking functionality and created an intuitive user interface with React, enhancing user productivity and ensuring seamless interaction
- Utilized Chrome Extension APIs for tab manipulation and state persistence, incorporating state management and local storage techniques to maintain and restore user sessions and preferences

#### SOFTWARE DEVELOPMENT SKILLS

Languages & Technologies: Java, C++, C#, R, SQL, JavaScript, HTML/CSS, Python Development Tools & Frameworks: React, Spring Boot, JUnit, Docker

Version Control & Collaboration Tools: Git, GitHub, HelixCore