

EDUCATION

The University of Chicago, Chicago, IL GPA: 3.80/4.00

BS in Computer Science, specialization in Data Science, expected June 2022

SKILLS

Languages: Python, C, Elm, Clojure

Computer: Proficient in Microsoft Excel, Adobe Photoshop, Adobe Premiere

HONORS

- [Delivered keynote presentation](#) for 21st annual Scheme Workshop (as part of the International Conference of Functional Programming), giving a student perspective of functional and Lisp-family languages in pedagogy.

EXPERIENCE

Bohdan Khomtchouk Lab, University of Chicago Department of Medicine (Section of Computational Biomedicine and Biomedical Data Science)

Product Manager, Software Engineer, June 2020-present

- Designed and oversaw the creation of an augmented reality application to display 3D complex networks. Intended to advance visualization of 3D networks for clinical doctors and medical researchers.
- Led team of 5 to design and implement prototype from scratch, including XML parsing, nodes/edge rendering, force-directed visualization algorithms, and UI.
 - Used C# and Unity, with the ARCore and ARKit libraries for platform-specific AR features.
- Continue assisting Dr. Khomtchouk during academic year with academic writing on future of WebXR using WebAssembly

University of San Francisco Health Informatics, San Francisco, CA

Software engineer, Bioinformatics, June-August 2019

- Assisted with early design and development of a web application to crowdsource electroencephalogram (EEG) and electrocardiogram (EKG) data analysis.
- Implemented a continuous integration and automated testing system using GitHub and Travis CI, and designed a login, accounts, and single-sign-on system using Clojure and Neo4j.

iD Tech Camps, San Francisco, CA

Instructor, June-August 2018

- Designed and taught lessons to small groups of 8-16 year old students, mentored creations of a final project
- Classes consisted of topics in video production, robotics, coding 101, and game design.

Campus Policy Research Institute, University of Chicago

Deputy Executive Director, Co-founder, September 2019-present

- Serve on management team of student-run campus policy research group.
- Assist research, communication, advisory, and project organization

PROJECTS

Elm Synth Sequencer

June 2020

- Interactive music sequencer web app: available on synth.jonahdf.com
- Customizable scales, beats, bpm, transposition, and synthesizer, with support for file saving/loading
- Written in Elm and Javascript with the Web Audio API

INTERESTS

Amateur astronomy, choral singing, jazz trumpet, outdoor rock climbing, backpacking, Hillel, Hack@UChicago