Nick Howlett

nick@nhowlett.com portfolio linkedin github Phone: 510-356-8151

Skills JavaScript, C, Ruby on Rails, Python, React.js, Redux, SQL, HTML5, CSS3

Education

University of Chicago - BA Psychology (Honors) GPA: 3.53/4.00, Minor, Computer Science GPA: 3.59/4.00 (2014-2018)

• **Curriculum Highlights** - Networks and Distributed Systems, Usable Security and Privacy, Algorithms **App Academy** - Rigorous 1,000-hour full-stack software development course with a <3% acceptance rate (2019)

Projects

Sherwood (JavaScript, React.js, Redux, Recharts, Ruby on Rails, WorldTradingData API) live site | github A single page app clone of the popular stock trading website robinhood.com

- Designed an algorithm to efficiently sift through up to five years of a user's transactions to build an interactive chart of portfolio trends
- Built a web scraper to harvest, parse, and store data on over 8,000 publicly traded companies, including number of employees, dividend yields, and, company descriptions
- Implemented interactive charts of real-time stock data ranging from one day to five years prior using data provided by the WorldTradingData API

MyPhotoJourney (MongoDB, Express, React.js, Node.js, d3, AWS S3, node-geocoder) Web application for creating and sharing an interactive map of a trip made with a team of four.

- Streamlined photo upload experience by prepopulating date and GPS coordinates from EXIF/TIFF photo metadata, enhancing upload form usability
- Implemented secure user authentication from backend to frontend, hashing and salting passwords with BCrypt, and leveraging JSON Web Tokens stored in Axios headers to persist user session

Trigonometry Wars (JavaScript, HTML5 Canvas, CSS)

Game where the player tries to survive against waves of enemies with a slow-charging bouncing laser

- Designed a collision algorithm leveraging vector math to ensure the player's laser accurately bounces obstacles and providing pixel-perfect detection for enemy-player, laser-player, and enemy-laser collisons
- Built a high-score board and score submission using a lightweight Node.js, Express, and MongoDB server

Experience

Technical Instructor

App Academy

- Provide hands-on support, feedback, and mentorship to students undertaking projects using a variety of technologies including React, Redux, Rails, Node.js, Express, MongoDB
- Administer mock interviews and whiteboarding sessions on data structures, algorithms, and system design to
 prepare students for interview questions

Honors Thesis Student

Developmental investigations of Behavior and Strategy Lab

- Analyzed and charted data for studies on moral-cognitive development using R and Excel
- Conducted interviews with over 1,000 children for studies published in major Psychology journals
- Completed honors thesis on children's understanding of confession, leniency, and punishment

Leadership

President

University of Chicago Japanese Animation Society

- Directed annual student-run day-long public convention with over 1,200 attendees, including securing sponsorships, managing over 40 volunteers, and recruiting guest speakers
- Raised \$5,000 in funding and secured meeting and event space from university administration

US/UK Citizen, Proficient in written and spoken Japanese

San Francisco, CA variety of

May 2019 - Present

Sept 2015 - June 2018

Chicago, IL

live site | github

live site | github

June 2017 - June 2018 Chicago, IL