

David Hacker

Contact Information

Email: dmhacker@yahoo.com
Website: dmhacker.github.io
Phone: (805) 368-5071

Permanent Address

3522 Sweet Clover St.
Thousand Oaks, California 91362

EDUCATION

Bachelor of Science, Computer Science
University of California, San Diego

2017 – 2021

PROFESSIONAL EXPERIENCE

Cal Lutheran Center for Entrepreneurship, Westlake Village, CA

Application Developer, MyGolfFaves

June 2017 – September 2017

- Using React Native, created iOS and Android apps for MyGolfFaves, a golfing discounts company.

Full Stack Developer, Blinks

July 2016 – January 2017

- Improved the resource demands and efficiency of the Android app for Blinks, a company that used Eddystone beacons to broadcast information about retail stores and their wares.
- When Blinks pivoted to being a subscription service for iOS stickers, I designed a functional backend to hold all of their stickers. Used the MEAN stack, mLab, Amazon S3 for image storage, and Cloudfront.

Full Stack Developer, IndieU

March 2016 – August 2016

- Redesigned the website for IndieU, a music sharing company. Involved numerous layout changes and required knowledge of the MEAN stack.

PROJECTS

Alexa YouTube Skill

github.com/dmhacker/alexa-youtube-skill

- An unpublished skill that lets Amazon Alexa devices play audio from YouTube videos.

Photorealistic Rendering Engine

github.com/dmhacker/RenderingEngine

- Ray tracer with configurable options for a variety of features: vertex normal interpolation using barycentric coordinates, Phong shading, ray reflection & transmission, balanced k-d tree generation, camera rotation, and anti-aliasing.

Text Compression Experiments

github.com/dmhacker/yatc

- Developed custom compression algorithm combining existing designs: Burrows-Wheeler transform, move-to-front transform, run-length encoding, Huffman encoding

SKILLS

- Languages: Java, Python, JavaScript, C++, Golang, HTML, CSS
- Frameworks: MEAN stack, Flask, Firebase, React Native, Materialize, Bootstrap

AWARDS & HONORS

1st Place, Startup Weekend Conejo Valley 2017

Honorable Mention, SIAM M3 Challenge 2017

3rd Place, MIT Zero Robotics 2015 & 2016

National Merit Finalist

Eagle Scout