

David Hacker

Contact Information

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

Present Address

#60318 9450 Gilman Dr.
La Jolla, CA 92092-0100

Education

B.S. in Computer Science
University of California, San Diego

June 2021

Experience

Application Developer, MyGolfFaves

June 2017 – Sep 2017

- Used React Native to create iOS and Android apps for MyGolfFaves, a golfing discounts company.

Full Stack Developer, Blinks

July 2016 – Jan 2017

- Improved the resource demands and efficiency of Blink's Android app.
- Created a backend to support Blink's iOS sticker subscription service using the MEAN stack, mLab, Amazon S3 and Cloudfront.
- Designed a corresponding admin panel.

Full Stack Developer, IndieU

Mar 2016 – Aug 2016

- Redesigned the website for IndieU, a music streaming service for college students.
- Involved numerous layout changes and required knowledge of the MEAN stack.

Projects

Alexa YouTube Skill

Node.JS, Lambda, Heroku

- An unpublished skill that lets Amazon Alexa devices play audio from YouTube videos

Photorealistic Rendering Engine

Java, Swing

- Configurable, multi-threaded ray tracer
- Options: Vertex normal interpolation, Phong shading, ray reflection & transmission, balanced k-d tree generation, camera rotation, and anti-aliasing.

Text Compression Experiments

Python, Numpy

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

Honors & Awards

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

Computer Skills

Languages: Java, Python, JavaScript, C++, HTML, CSS
Frameworks: MEAN stack, Matplotlib, Numpy, Keras, Fire-base, React Native, Materialize, Bootstrap