

# David HACKER

EMAIL: [dmhacker@yahoo.com](mailto:dmhacker@yahoo.com) WEBSITE: [dmhacker.github.io](http://dmhacker.github.io) PHONE: (805) 368-5071

## EDUCATION

---

JUNE 2021 B.S. in COMPUTER SCIENCE  
University of California, San Diego

## PROFESSIONAL EXPERIENCE

---

JUNE 2017 – SEPT 2017	<b>Application Developer at MYGOLFFAVES</b> Used React Native to create iOS and Android apps for MyGolfFaves, a golfing discounts company. Directed production of the backend API.
JULY 2016 – JAN 2017	<b>Full Stack Developer at BLINKS</b> 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, and designed a corresponding admin panel.
MAR 2016 – AUG 2016	<b>Full Stack Developer at INDIEU</b> Redesigned the website for IndieU, a music streaming service for college students, involving numerous layout changes. Required knowledge of the MEAN stack and familiarity with Amazon's EC2 platform.

## PROJECTS

---

SUMMER 2017	<b>Alexa YouTube Skill</b> <i>NodeJS, AWS Lambda, Heroku, FFmpeg</i> An unpublished skill that lets Amazon Alexa devices play audio from YouTube videos.
SUMMER 2016	<b>Text Compression Experiments</b> <i>Python</i> Developed custom compression algorithm combining existing designs: Burrows-Wheeler transform, move-to-front transform, run-length encoding, Huffman encoding.
SPRING 2016	<b>Photorealistic Rendering Engine</b> <i>Java, Swing</i> Ray tracer with configurable options for a variety of features: vertex normal interpolation, Phong shading, ray reflection & transmission, balanced k-d tree generation, camera rotation, and anti-aliasing

## HONORS & AWARDS

---

AUG 2017	Eagle Scout Award
APR 2017	1st Place: Startup Weekend Conejo Valley 2017
MAR 2017	Honorable Mention: SIAM M3 Challenge (top 8% of teams)
SEPT 2016	National Merit Finalist
JAN 2016	3rd Place: MIT Zero Robotics 2015

## COMPUTER SKILLS

---

Languages: Java, Python, JavaScript, C++, HTML, CSS,  $\text{\LaTeX}$   
Frameworks: MEAN stack, Flask, Firebase, React Native, Materialize, Bootstrap