

David HACKER

EMAIL: dmhacker@yahoo.com WEBSITE: dmhacker.github.io PHONE: (805) 368-5071

EDUCATION

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

PROFESSIONAL EXPERIENCE

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|-----------------------|---|
| JUNE 2017 – SEPT 2017 | Application Developer at MYGOLFFAVES
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 | Full Stack Developer at BLINKS
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 | Full Stack Developer at INDIEU
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

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| SUMMER 2017 | Alexa YouTube Skill <i>NodeJS, AWS Lambda, Heroku, FFmpeg</i>
An unpublished skill that lets Amazon Alexa devices play audio from YouTube videos. The platform has over 200 downloads and was reviewed by the German tech channel Venix, which has over 10,000 subscribers. |
| SUMMER 2016 | Text Compression Experiments <i>Python</i>
Developed custom compression algorithm combining existing designs: Burrows-Wheeler transform, move-to-front transform, run-length encoding, Huffman encoding. |
| SPRING 2016 | Photorealistic Rendering Engine <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

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| 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

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| Languages: | Java, Python, JavaScript, C++, HTML, CSS, SQL, \LaTeX |
| Frameworks: | MEAN stack, Flask, Firebase, React Native, Materialize, Bootstrap |