

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An unpublished skill that lets Amazon Alexa devices play audio from YouTube videos.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

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