# Adam Hammond

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### Education

### **Computer Science B.S.**

2020 - December 2023 (Expected)

University of California, Santa Cruz

GPA: 3.75

Honors: 5x Dean's Honors

Spring 2021-2022, Winter 2021-2023

## **Projects**

### iCook Cookbook Application | Javascript, React Native, Node.js SQLite, Expo, Scrum

- Worked in an agile team of 6 UCSC students, strictly adhering to the Scrum methodology.
- Designed + built the frontend UI, search functions, database updates, solved UX corner cases.
- Relevant scrum documents: Release Planning, Sprint planning, Scrum board, burnup chart, and more.
- React Native application compatible with Android & iOS using SQLite for local-first storage.
- Built in React.js, hosted on Github Pages with a custom domain name, managed with Node.

#### Personal Website | Javascript, React.js, Node.js RWD

- Built in React.js, hosted on Github Pages with a custom domain name, managed with Node.
- Adhered to Responsive Web Design principles, fits on any device.

#### Machine Learning sleep classifier | Python, Sklearn, Pandas

- ML project that classified long periods of mouse EEG and EMG data to assist UCSC Neuroscience researchers in processing sleep data.
- Handled transformation of text data into classifiable periods to train and test with, debugged and designed model, managed project and developers.
- Worked closely with UCSC Neuroscience researchers to understand their needs and pitch a relevant application trained by their data.

#### Huffman Encoder / Decoder | C, Object-Oriented Programming, Modular Design

- Created custom abstract data types including a Stack, Linked List of nodes, Min Heap, and an I/O module. Though
  coursework related, only some function headers were provided.
- Designed a functioning huffman encoding module that utilized the custom ADTs to encode / decode files to compress them, it works for all ASCII characters.
- Written in C, used GDB and Valgrind for debugging and leak detection.

#### Full Stack Email Project | Javascript, React.is, Node.is RESTful API, PostgreSQL

- Created a full stack email application from the ground up, using a React.js frontend, Express.js server, and PostgreSQL database.
- Uses a custom RESTful Email API, as well as JWT authentication supporting any number of users.
- Can create, send, and receive emails across users.

# **Work Experience**

# Red Tide Games, junior programmer

May 2021- Sept 2022

- Designed C++ classes and functions as parents for Unreal 5 elements.
- Picked up and utilized many Unreal 4 & 5 systems like Behavior trees, Blueprints as well as UI plugins.
- Worked remotely with an experienced software engineer on a game engine and prototype.
- Used Perforce for source control with continuous integration on a custom Jenkins server.

### Technical Skills

Concepts: Machine Learning, Algorithm Analysis, Full Stack Web Development, Compilers

Languages: C, C++, Python, JavaScript, SQL,

**Technologies / Data Management:** PostgreSQL, SQLite, Docker, Expo, Unreal Engine, GDB, Valgrind **Frameworks / Libraries:** React.js, React Native, Node.js, Express.js, RESTful APIs, Pandas, Sklearn **VersionControl / Automation:** Git, Github, Perforce, Windows Batch & Bash Scripting, Make, Jest.js **Markup / Formatting:** HTML, CSS, LaTeX, Markdown