TREY OEHMLER

(203) 722-1497 treyoehmler@gmail.com www.treyoehmler.com

EDUCATION

Middlebury, VT Middlebury College September 2016 - August 2020

- · Major: Computer Science, BA; Minor: Mathematics
- **CS Coursework:** Algorithms and Data Structures, Computational Theory, Operating Systems, Embedded Systems, Data Science, Networking, Parallel Computing
- · Mathematics Coursework: Multivariable Calculus, Number Theory, Modeling, Linear Algebra
- · Athletics: Varsity Swimming, member of NESCAC All-Academic Team for 2017-2019 seasons

EMPLOYMENT

Multiple years of experience as an independent contractor with several mid-size companies as clients (listed below)

Web Engineer, Designer

Landis Architects

Spring 2020 - Present

www.landisconstruction.com (in development): Top Washington, DC renovation and remodeling firm

- · Built a dashboard to manage portfolio projects and implemented a UI to showcase and filter projects.
- Implemented a RESTful backend server to create and manage SEO meta tags using PostgresSQL.
- · Created an interface and system for content creation and persistent data management within a RDBMS.

Web Engineer DomCBD Spring 2019 - Spring 2020

www.domcbd.co: Private Equity backed wellness brand based in Los Angeles

- · Implemented an online store and checkout flow by utilizing BigCommerce and building a RESTful API.
- · Improved page loading speeds by 40% through integrating page-level caching with VueJS.
- · Increased responsiveness by optimizing layouts for mobile and tablet devices.

Web Engineer DomPen Fall 2017 - Spring 2020

www.dompen.co: Private Equity backed cannabis company based in Los Angeles

- · Redesigned the company's website from the ground up using Laravel (PHP) and Vue (Javascript).
- · Implemented a responsive events calendar for displaying in-store demos of products.
- · Built a store locator tool for customers to provide directions to the nearest retailer of DomPen products.
- · Created a system for customers to verify certificates of analysis for cannabis offerings by implementing a tool that matches third-party lab testing results with corresponding batches of products.
- · Increased conversion rate by 150% by adding a flow for users to purchase products from online retailers.

SOFTWARE PROJECTS

Personal Website: <u>www.treyoehmler.com</u> (for additional information and projects)

Automatic Brain Tumor Segmentation with Convolutional Neural Networks

- · Researched and developed a machine learning model for segmenting regions of brain tumors on an MRI.
- Trained and tested using the BRATs dataset from UPenn's global segmentation challenge; the model achieved a dice coefficient consistent with the results of the most up-to-date segmentation models.
- · <u>Utilized:</u> Python, Numpy, Tensorflow / Keras, AWS, Azure, Google Cloud Platform.

I/O System Call Wrappers for Standard C System Calls

- · Built a collection of functions that insulate a program from the inefficiencies of I/O-related system calls.
- Minimized the number of system calls by incorporating a block buffering scheme.
- <u>Utilized</u>: C programming, memory management, Bash for testing, GDB for debugging, UNIX.

Memory Allocation Library for C

- · Implemented a library of memory allocations functions to replace standard C library equivalents.
- · Accommodates memory requests by dynamically growing and shrinking the size of the heap.
- <u>Utilized</u>: C programming, system design, memory architecture, GDB for debugging, UNIX.

SKILLS

Software: (proficient): C, Python, Javascript, R, HTML/CSS, SQL, UNIX, Git (familiar): C++, Java, AWS, GCP