

Trey Oehmler

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203-722-1497

EDUCATION

Middlebury College

Bachelor of Arts, Computer Science Major, Mathematics Minor

Middlebury, VT

Anticipated Graduation May 2020

- Computer Science Coursework: Data Structures, Computer Architecture, Theory of Computation, Systems Programming, Software Development, Advanced Operating Systems, Embedded Systems, Algorithms & Complexity, Data Science
- Mathematics Coursework: Calculus II, Linear Algebra, Multivariable Calculus, Number Theory, Mathematical Modeling, Math Foundations of Computing
- Athletics: Varsity Swimming, member of NESCAC All-Academic Team for 2017-2019 seasons

New Canaan High School

Diploma with honors; GPA: 4.0 (9.50/10.0)

New Canaan, CT

June 2016

- **Athletics:** Varsity Swimming; Captain for 2015-2016 season; set a state record in the 200 yard medley relay.
- **Volunteering:** Co-President and VP of Web Technology for the NCHS Service League of Boys. Oversaw and managed entire volunteer organization consisting of 220 students and 300+ parent members.
- **Web Design:** Worked as the Web Director for the school newspaper and oversaw all content published online. Led a re-design and development of the site's content management system.

EXPERIENCE

TMO Consulting

Designed and developed custom web focused solutions, including web design and development, advanced analytics, and ecommerce integration for multiple clients.

Middlebury, VT

June 2017-Present

DomCBD (2019-Present)

- Developed a custom content management system for the company's blog.
- Implemented a highly responsive design optimized for cross-browser support and loading speed.
- Developed a custom headless ecommerce solution to provide an improved customer experience.

DomPen (2017-Present)

- Built multiple branding sites that utilize best practices for SEO, accessibility and performance.
- Created a responsive custom events calendar with a Google Calendar API.
- Designed and built a responsive store locator using Google Maps API.
- Ideated and developed a way to drive traffic to Ease.com, becoming one of the top five sources of revenue conversion for the largest cannabis company in the U.S.
- Created a unique system to allow consumers to evaluate the purity and authenticity of cannabis offerings.

Ghostlight (2018)

- Designed and developed a promotional website for an independent movie.

Safe Passages House (2017)

- Created a highly responsive informational site with cross-browser capability.

Woodway Country Club

Assistant Swim Coach

Darien, CT

June 2016-August 2018

PROGRAMMING PROJECTS

- **Automatic Brain Tumor Segmentation:** Developed a machine learning model that uses a convolutional neural network to automatically segment High Grade Gliomas. The model was trained on the BRATS2015 dataset through AWS and Azure and implemented using Keras with a Tensorflow backend. (Spring 2019)
- **One Life Website:** Designed and developed an informational website for a student-run charity at Middlebury College. Implemented a custom newsletter subscription form and integrated Stripe to accept donations. (Winter 2018)

- **Malloc:** Built a library of memory allocation functions that replace the standard C library equivalents. The implementation attempts to intelligently grow the size of the heap to accommodate memory requests. (Fall 2018)
- **I/O System Call Wrappers:** Implemented block buffering to increase the efficiency of I/O related system calls. Developed wrapper functions for the UNIX system calls open (2), close (2), read (2), write (2) and lseek (2). (Fall 2018)
- **Custom Shell:** Developed a shell that accepts user input and supports input/output redirection and pipelines. (Fall 2018)
- **Self-Linker:** Implemented a program that circumvents the standard runtime linking procedure on UNIX systems. (Fall 2018)
- **Woodway Aquatics Website:** Designed and developed a scheduling and event planning platform for the aquatics program at Woodway Country Club for lessons, practices and swim meets. (Summer 2018)
- **Kinect Drum Set:** Developed a drum set using Microsoft Kinect and C++ at age 13. (Winter 2011)
- **iTennis:** Developed a simple iPhone game in Objective-C. (Spring 2011)
- **VoteTube:** Built a voting platform that utilized the ELO rating algorithm for ranking YouTube videos. (Winter 2010)

ADDITIONAL

Skills: (Fluent) Python, HTML/CSS, VueJS, PHP, JS (CommonJS and ES6), SEO, C, MYSQL, Eloquent, Git (Proficient) Java, Tensorflow, ReactJS, Apache2, AJAX, AWS, Azure, Photoshop, R (Familiar) Heroku Swift, C++, Ruby

Academic Recognition: Woodway Country Club Scholarship recipient (2017-2019), AP Scholar with Honors (2016), National Honor Society Member (2014-2016), Connecticut Swimming Scholar Athlete (2013-2016)