

EDUCATION

- **Middlebury College** Middlebury, VT
Bachelor of Arts, Computer Science Major, Mathematics Minor *Anticipated Graduation May 2020*
 - **Computer Science Coursework:** Data Structures, Computer Architecture, Theory of Computation, Systems Programming, Software Development, Advanced Operating Systems
 - **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 through 2019 seasons.
- **New Canaan High School** New Canaan, CT
Diploma with honors; GPA: 4.0 (9.50/10.0) *Aug. 2012 – June 2016*
 - **Athletics:** Varsity Swimming, Elected 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 student and 300+ parent members. Helped to organize new volunteer opportunities while directing current and ongoing projects. Oversaw the implementation of an online registration system.
 - **Web Design:** Worked as the Web Director for the school newspaper and oversaw all content published online. Additionally led a re-design and development of the site's content management system.
 - **Programming:** Recognized by Complex Magazine in 2013 as one of the top 10 youngest tech prodigies in the world for various programming projects completed from ages 11-14. (Projects included below)

EXPERIENCE

- **Freelance Web Developer** Middlebury, VT
Coordinated and communicated with multiple clients. Full portfolio on treyoehmler.com *June 2017 - Present*
 - **DomCBD:** Developed a custom content management system for the company's blog and implemented a highly responsive design optimized for cross-browser support and loading speed. Implemented a custom storefront for using Shopify's API.
 - **DomPen:** Built a variety of branding sites that utilize best practices for SEO, accessibility and performance. Implemented several graphic-heavy designs while maintaining low request sizes and fast loading speeds.
 - **Ghostlight:** Designed and developed a promotional website for an independent movie. Integrated SEO techniques and optimized page design and graphics to increase responsiveness and cross-browser support.
 - **Safe Passages House:** Designed and developed a highly responsive informational site with cross-browser compatibility.
- **Woodway Country Club** Darien, CT
Assistant Swim Coach *June 2016 - Aug. 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 BRATS 2015 dataset through AWS and Azure and implemented using Tensorflow with a Keras 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 2019)
- **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 planning lessons, practices and swim meets. (Summer 2018)
- **Kinect Drum Set:** Developed a drum set using the 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) HTML/CSS, VueJS, PHP, JS (CommonJS and ES6), SEO, C, MYSQL, Eloquent, Laravel, Python, Git (Proficient) Java, Tensorflow, ReactJS, Apache2, AJAX, AWS, Azure, Photoshop (Familiar) Heroku, Swift, C++, Ruby
- **Academic Recognition:** Woodway Country Club Scholarship recipient (2017-19), AP Scholar with Honors (2016) National Honors Society member (2012-16), Connecticut Swimming Scholar Athlete (2013-16)
- **Swimming:** Competed and trained 11 months of the year as a competitive swimmer for 15 years.