

William Andrew Mullins

Full Stack Software Engineer

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Software engineer who is motivated by working on challenging problems both individually and in collaborative settings. Previously worked in neuroscience research developing skills in problem solving, data manipulation, interpersonal communication, and public speaking. Passionate for learning and enjoy untangling complex issues in back-end architecture as well as build up efficient and intuitive front-end interfaces.

SKILLS

Languages: JavaScript, HTML5, CSS3, MATLAB, Python | **Libraries and Frameworks:** Express.js, Mongoose, React.js, Node.js, JQuery, THREE.js | **Databases:** MongoDB, PostgreSQL, Django | **Tools:** Linux, JSON, Github, VSCode, Trello, Figma

SOFTWARE DEVELOPMENT PROJECTS

Nebula-Nav: Full Stack Educational Solar System Website - [GitHub](#) - [Live Site](#)

- Engaged in paired programming with three developers to collaboratively design and develop a multipage, full-stack, CRUD Educational Solar System site.
- Created front-end pages in REACT to make RESTful API calls to an Express, MongoDB, and Node.js backend.
- Implemented THREE.js to generate an interactive 3D model of our solar system
- Technologies used: **MongoDB, Express, REACT, HTML5, CSS3, VSCode**

Brain Atlas: Full Stack Educational Brain Anatomy Website - [GitHub](#) - Live Site Placeholder

- Developed an interactive brain anatomy front end allowing users to navigate the site using 2D anatomical models
- Made RESTful API calls to an Express, MongoDB, Node.js backend allowing for full back-end CRUD on all collections and partial or full CRUD from the front-end depending on collection type and the user's admin status
- Created all models in Figma and styled all pages with vanilla CSS3
- Technologies used: **Javascript, MongoDB, Express, HTML5, CSS3, VSCode**

WhacAMole: Front End Web Browser Game- [GitHub](#) - [Live Site](#)

- Designed a front end browser whac-a-mole game that gives the user options for difficulty and size of the gameboard. Deployed on Surge
- Technologies used: **Javascript, CSS3, HTML5, Figma, VSCode**

PROFESSIONAL EXPERIENCE

Postbac IRTA, National Institutes of Health (NIH, NINDS) | Bethesda, MD

July 2020 - March 2023

- Acquired and processed 3T and 7T MRI scans for longitudinal studies on Multiple Sclerosis conducted by the Translational Neuroradiology Section (TNS)
- Performed manual and semi-automated segmentation of brain and spine scans using MATLAB, Python, and ITK-SNAP
- Analyzed disease progression and its relationship with metrics such as lesion burden, type, and location with Excel, SPSS, and R-Studio

Undergraduate Researcher, VUMC Department of Neurology | Nashville, TN

April 2019 - May 2020

- Conducted a study on applied atrophy network mapping to explain patterns of neuron loss in frontotemporal lobar degeneration patients using MATLAB

EDUCATION

General Assembly | Software Engineering immersive Certificate

May 2023 - August 2023

Vanderbilt University | *Bachelor of Arts in Neuroscience* | *Minor in Medical Sociology*
Honors: Cum Laude, Dean's List

August 2016 - May 2020