JASPER TY

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EDUCATION

Drexel University *September 2019 - June 2024*
B.S. in Computer Engineering
Minor in Mathematics

INTERESTS

Functional analysis, partial differential equations, combinatorics, logic and theoretical computer science

EXPERIENCE

MOD March 2023 - Sept 2023
UX Developer *Philadelphia, PA*

- Designed and deployed microsites within single-week timeframes
- Processed EEG headset data from consumer trials to measure trends in emotional responses
- Created an internal platform for providing machine learned scores of various designs

Moberg Analytics March 2022 - Sept 2022
Back End Developer *Philadelphia, PA*

- Developed Flask microservices to handle clinical trial data access and user management.
- Created a streaming, web-based multimodal visualization tool for examining and annotating measurement recordings stored in the cloud, using React and D3
- Implemented on the main website a clinical trial dashboard using React that allows for advanced filtering and display between patients, sites, and modalities.

Lewis Katz School of Medicine, Temple University March 2021 - Sept 2021
Brain Computer Interface (BCI) Software and Interface Development Research Assistant *Philadelphia, PA*

- Developed BCI scenarios using the P300 paradigm for use with an electric wheelchair using a wet-cap EEG
- Designed a neck brace in Fusion 360 which allows the wearer to move their head freely from side to side while supporting neck muscles weakened due to muscle atrophy
- Prototyped the neck brace using different materials and printing processes for each part to suit design needs

Theoretical and Applied Materials Group, Drexel University January 2020 - March 2020
'Advanced Manufacturing' VIP Team Member *Philadelphia, PA*

- Designed, simulated, and optimized solid lattice structures for use with selective laser melting, a method of additive manufacturing
- Proposed a workflow for solid lattice design and optimization using the Autodesk Netfabb software suite
- Developed a heuristic formula for calculating the volume of a solid lattice structure

TECHNICAL STRENGTHS

Programming Languages	Rust, C, C++, Python, Java, JavaScript, TypeScript, MATLAB Haskell, OCaml, Scheme
Languages	English, French, Tagalog, Waray
Other	LaTeX, Computer Graphics

MISCELLANEOUS

- 461st best Minesweeper player of all time (see the Authoritative Minesweeper Rankings)