Staas Lin

(610) 235-9178 | staaslin@gmail.com | https://www.linkedin.com/in/staas-l-522642259/ | https://github.com/stagomonster

Education

Purdue University, West Lafayette, IN
Bachelor of Science *Expected 2027*
Major: **Computer Science**
Major: **Applied Statistics**

Conestoga High School, Berwyn, PA *2020 – 2024*

- GPA: Weighted: 5.02, Unweighted: 3.95

Languages: Python, R, Java, C#, HTML5/CSS3, JS, PostgreSQL, XAML, Shell
Frameworks: Linux, Git, pandas, NumPy, .NET, VSCode
Coursework: Mobile App Development, Web Development, Introduction to PostgreSQL, Object-Oriented Programming, Multivariable Calculus

Work Experience

Mathematics Tutor – *Lafayette Urban Ministry* *September 2024 - Present*

- Teach students fundamentals of mathematics through personalized inquiry-based discovery
- Promote development of problem-solving abilities via real-world applications and concepts.

Projects

Mobile App for Guild Wars 2 Builds | .NET Xamarin Forms, C#, XAML, SQL *November – December 2023*

- Built an Android mobile application using Xamarin Forms for saving and editing character builds in Guild Wars 2, an MMORPG with over 16 million players.
- Produced a query search system sorting through character builds for quick and accurate data retrieval.
- Applied asynchronous functionality and SQL database processing to localize saves within the app. This substantially increased processing efficiency, optimizing performance by a more than twofold improvement.
- Utilized the implementation of MVVM (Model-View-ViewModel) architecture, enhancing project organization and significantly improving development efficiency and code maintainability across new versions.

Go Engine | Python *May 2023*

- Designed and developed a Python engine to run board games, complete with comprehensive scoring systems and player assignment.
- Applied advanced heuristics to create a sophisticated influence mapping function for mid-game analysis.
- Enhanced the engine's analytical capabilities by incorporating insights from research papers on graphing the influence of stones in incomplete positions, leading to more accurate and realistic game evaluations.

Statistical Experiment on Effect of Formality on Writing Utensil Selection | R Studio *December 2022*

- Designed and executed an experiment involving 129 participants to measure writing utensil preferences, contributing to data-driven insights into human behavior and psychology.
- Administered data collection and data cleaning, ensuring suitability for usage in data analysis with R.
- Applied statistical techniques including Chi-Squared Test for Independence and Two-Sample T-Interval.

Graphical Adventure Game | Python, Pygame *December 2021*

- Independently developed a Pygame application, placing in 3rd in the 2021 CodeFest Alpha hackathon.
- Implemented user choices that dynamically influenced in-game statistics and options.
- Developed comprehensive inventory and loot systems, enhancing choice complexity and narrative depth.

Volunteer Experience

English Teaching Volunteer Program *Summer 2023*
Sponsor: Overseas Community Affairs Council of The Executive Yuan of Taiwan

- Completed 1 week of training for English teaching in Taipei.
- Taught English full-time to 26 middle schoolers at a rural school in Tainan.
- Developed academic lesson plans and activities for student engagement in collaboration with 3 local English teachers.