

VAHN KESSLER

vikessler@wesleyan.edu • 203-434-5625 • <https://vahnkessler.com>

EDUCATION

Wesleyan University, Middletown, CT

September 2021 – May 2025

Bachelor of Arts, GPA: 3.8

- **Majors:** Computer Science, Mathematics, Music
- **Relevant Coursework:** High Performance Scientific Computing, Computer Networks, Design of Programming Languages, Game Design and Development, Data Visualization, Discrete Math, Multivariable Calculus, Linear Algebra, 20th Century Composition Techniques, Seminar: Music, Politics and Culture

The Juilliard School, New York, NY

September 2028 – May 2021

Pre-College, GPA: A

- **Major:** Classical Guitar
- **Relevant Coursework:** Solo Guitar Performance, Ensemble Guitar Performance, Chamber Performance, Ear Training, Theory, Counterpoint, Sound Systems and Psychoacoustics

EXPERIENCE

Engineer Intern, **Wasabi Technologies**, Boston, Massachusetts

May 2024 – August 2024

- Built a highly scalable REST API in golang with Swagger 2.0 that collected and displayed metrics from Prometheus and Sonatype Nexus Repository across 7 different data centers. Utilized PostgreSQL databases to collect and maintain data. Created and directed alerts with Alertmanager. Deployed into Kubernetes via Ansible and Terraform.
- Built a responsive, modular, scalable frontend for the API in Typescript with React.js, using Node.js
- Created tickets with Atlassian Jira and documentation with Atlassian Confluence

Researcher, **Programming Languages and Privacy Lab**, Middletown, Connecticut

January 2024 – May 2024

- Evaluated detection, approaches and techniques of web-based fingerprinting

Tutor, **Self Employed**, Fairfield County, Connecticut

August 2020 – Present

- Instructed students in 2+ hour sessions covering a variety of topics including algebra, trigonometry, geometry, machine learning engines, math fundamentals, computer science fundamentals, and guitar.
- Sessions with a preverbal autistic student that delivered a range of music therapies to engage speech, focus and cooperation—required an ability to adapt to a wide variety of client needs.

PROJECTS

Web Scraper

May 2023

- Designed and implemented Python code that ran on Wesleyan's High Performance Computing Cluster to scrape all of the Honors Theses from Wesleyan's digital collections with BeautifulSoup4. Achieved 100x speedup with Pandas, Joblib, NumPy.

Virtual Escape Room

December 2023

- Developed a 3D virtual escape room in Unity with several puzzles that utilize innovative and creative interactions, a well-crafted layout, a compelling theme, and noteworthy visual effects and graphics.

Chess Visualizations

April 2023

- Used R Studio to pull chess.com datasets of the top chess players in the world to make five interactive visualizations mapping openings, ELO, board positions, and player locations.

SKILLS AND INTERESTS

Python, Go, Java, C++, C#, C, Standard ML, JavaScript, TypeScript, SQL, jQuery, React.js, Node.js, Redis, PostgreSQL, Docker, Kubernetes, Ansible, Terraform, Swagger 2.0, RESTful API, NumPy, Numba, PyPy, CUDA, Cython, Joblib, Pandas, Swifter, Dask, NSQ, functools, gevent, Tornado, bcrypt, batching, BASH scripting, Slurm, BeautifulSoup, Unity, RStudio, Git