Skyler Grandel

(417) 543 1123 | skyler.h.grandel@vanderbilt.edu | LinkedIn | Personal Website

EDUCATION

Vanderbilt University   **Nashville, TN**
Bachelor of Science in Computer Science   *Graduation: May 2022*
- **GPA:** 3.85

Doctor of Philosophy in Computer Science   Expected *Graduation: May 2027*
- **GPA:** 4.0
- **Research Interests:** AI for Software Engineering, Human Factors in Software Engineering, Human Factors in Cybersecurity, LLMs and Generative AI, Software Engineering Education and Training

PROFESSIONAL EXPERIENCES

Vanderbilt University Medical Center   **Nashville, TN**
Audio-Visual Assistant   *Aug. 2018 – May 2020*
- Solved hardware and software issues for the Vanderbilt School of Medicine, working with advanced equipment and multiple operating systems
- Prepared rooms on a tight schedule for classes, presentations, and other technologically assisted uses
- Fixed network problems for students, medical doctors, and university guests; aiding less technologically adept users

Car Tech LLC   **Opelika, AL**
Information Technology and Cybersecurity Intern   *May. 2021 – Aug 2021*
- Solved hardware and software issues for Car Tech's various divisions, setting up equipment, fixing security devices, and managing the company's server
- Researched, wrote, revised, presented, and implemented information security documents to follow ISO 27001 guidelines to ensure state-of-the-art standards for business security were met
- Researched market data to successfully renegotiate a contract with an external company, resulting in significant monthly cost savings of up to $8000

Vanderbilt University School of Engineering   **Nashville, TN**
Teaching Assistant and Grader   *Aug. 2020 - Present*
- Instructed students in Digital Systems, Operating Systems, Parallel Functional Programming, Concurrent Object-Oriented Programming, Scalable Microservices, and Software Engineering courses
- Assisted professors in grading dozens of assignments, tests, and the like in a timely manner for up to 19 hours per week
- Increased skill in circuit and processor design, Assembly programming, C and Java programming, Linux use, kernel development, backend server deployment, software engineering practices, and communications with fellow engineers

EXTRACURRICULAR EXPERIENCES

Deelzebub (Information Link: https://ifdb.org/viewgame?id=tx41ishkacmx8lij)   **Remote**
Lead Programmer   *May 2020 – Sept 2020*
- Committed 4 months to program an interactive fiction, text-based, online parser game, incorporating complex story paths and player interaction with an in-game world and the characters and objects it contains
- Designed from the bottom up, programming user interactions and backend software for a total of over 15,000 lines of code
- Self-taught TADS 3, the programming language used to create the game
- Bridged creative differences within a 4-person team in order to produce a professional, standalone product on a strict deadline

Research: Love In A Big World Project   **Remote**
Undergraduate Researcher   *Aug 2021 – May 2023*
- Research to develop a mental health application for middle and high school aged students struggling to cope with isolation and lack of access to mental health services during the COVID-19 Pandemic
- The project utilizes machine learning and natural language processing to recommend content for users without access to user history or invasion of privacy.
- Developed server with Spring, utilizing sophisticated development and design patterns and parallel computing techniques.
- Gained experience in Java, JavaScript, Python, server development, machine learning and NLP, and parallel computing

SKILLS

- **Software Development Skills**: Program Design, Software Pattern and Algorithm Use and Integration, Programming Language Analysis and Selection, Circuit Design, Database Design and Management, Operating System Kernel Driver Development, Object-Oriented, Logic, and Functional Programming Development, Scripting, Website Development, Concurrency and Multithreading in Java and POSIX libraries, Server Development with Spring Framework, Machine Learning and NLP
- **Computer Language Skills**: Java, C, C++, C#, JavaScript, HTML, CSS, MySQL, Python, Assembly, Racket, Prolog, Spring