Gaeul (Autumn) Kwon

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Education

Grinnell College   **Grinnell, Iowa**
Bachelor of Arts in Computer Science with Linguistics Concentration   *expected May 2025*

Courses: *Algorithm Analysis, Computational Numerical Optimizations, Software Design & Development, Computer Architecture, Java & C Programming, Linear Algebra, Graph Theory, Differential Equations, Applied Statistics, Statistical Learning*

Work Experience

Donald and Winifred Wilson Center at Grinnell College   **Grinnell, Iowa**
Student Full-stack Developer   *Fall 2023*

- Enhanced user experience by developing a responsive front-end interface for web applications with a control management system (CMS).
- Troubleshot and resolved complex technical issues, maintaining optimal system performance and uptime.
- Adopted agile development methodologies to improve project management efficiency and flexibility.
- Worked closely with the Grinnell Area Arts Council to ensure the software has the proper functionality and user experience.

PiQuant Co., Ltd.   **Seoul, South Korea**
Student Firmware Developer   *Jun 2022 - Mar 2023*

- Developed robust firmware solutions for the Portable Spectroscopic Analyzer project, resulting in improved product functionality.
- Performed thorough testing and validation of firmware releases, ensuring high-quality deliverables.
- Created comprehensive documentation for all developed firmware modules, facilitating easier updates and maintenance by colleagues.
- Conducted regular code reviews with colleagues, fostering a collaborative environment that prioritized quality assurance.

Research Experience

Computational & Synthetic Biology Lab (CSBL) at Korea University   **Seoul, South Korea**
Research Assistant   *Mar 2021 - Aug 2021*

- This research aims to construct a Python program that predicts the location of replication origins by using GC-skew, k-mer(s), and shared motifs. The team created an automotive routine to graph 20,000+ bacterial mtDNA data from NCBI and classified them based on the biological criteria inside the algorithm.

Projects

Grinnell College Experience
2D Game Development   *Current*

- A top-down 2D Role-Playing Game (RPG) mobile game in the setting of Grinnell College.
- Users can customize their characters, explore the Grinnell campus, and fight epic battles.
- Tech: GDScript, C#, Godot, Android, iOS, Agile Software Development.

Regression Model of House Sale Price in Ames, IA
Statistical Modeling   *Current*

- A regression model that predicts the price of a house in Ames with 79 characteristics of the house.
- Tech: R, Regression, Gradient Boosting.

Morphological Aspects in Second and Artificial Language Learning
Literature Review   *Current*

- Conducted a literature review to explore the experimental techniques used in the linguistic paradigm.
- Keywords: Artificial Language Learning, Second Language Acquisition, Morphology.

Pedagogical Implication of Digital Games in Second Language Acquisition
Literature Review   *Fall 2023*

- Discussed the pros and cons of digital games and recommended their proper usage in different age groups in second language learning.
- Selected as a poster presentation in Language & Linguistics Student Showcase in Grinnell College.
- Keywords: Second Language Acquisition, Game-based Learning.