Jonathan Kim

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EDUCATION

University of Wisconsin-Madison, School of Letters and Science — May 2027

- **Bachelor of Science,** Majors in Computer Science and Data Science | GPA: 3.83/4.00
- Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming, Data Science Modeling, Linear Algebra, Discrete Math, Computer Engineering, Machine Organization and Programming

EXPERIENCE

Full Stack Engineer Intern — Direct Supply, Milwaukee, Wisconsin — May 2024 – August 2024

- Engineered and deployed end-to-end workflows for a web platform that increased user operational efficiency by 200%.
- Designed and implemented client-facing frontend solutions that enabled users to access new features.
- Optimized SQL stored procedures, improving efficiency by 50% and building resilience.
- Actively contributed to Agile workflows through sprint work, planning, and retrospectives.

Full Stack Engineer — Szczykutowicz Lab, University of Wisconsin-Madison — Oct 2023 – Present

- Designed and implemented AWS architecture for lab environments, managing cloud-hosted databases and data storage solutions.
- Constructed databases using mySQL by implementing 5,000+ configurations for CT scanning protocols.
- Created GUI in MATLAB for optimizing scanning protocols, enabling user views and edits.
- Developed optimization workflows, reducing scan times and radiation doses by 50%.

Computer Programming Tutor — Code Ninjas, Madison, WI — Apr 2021 – Apr 2023

- Educated 100+ students ages 5-14 about JavaScript, Python, and Lua.
- Pioneered summer camp curriculum for applying coding concepts to mod popular games and develop problem solving skills.

PROJECTS

Chess Assistant Analyzer Bot — Jun 2023 – Jul 2023

- Developed bot to analyze 100,000+ user-inputted chess games and openings.
- Designed GUI that supports features such as adjustable depth of analysis and detailed animations of opening moves.
- Formulated statistical algorithm, targeting weaknesses and strengths, resulting in 20% increase in personal play rating.

Sentiment Analysis Program — Jan 2023 – Jun 2023

- Created bot which performs sentiment analysis using VADER on up to 100+ of the most recent articles from select news outlets.
- Visualized resulting trends and biases using Matplotlib and presented to 30+ professionals and peers.

Team Game Development — Sep 2022 – Jun 2023

- Worked as lead project manager and programmer in team of three on 2D Unity puzzle game.
- Streamlined workflow using GitHub, Agile, and Scrum to benchmark and delegate developer tasks.
- Presented at engineering fair to 100+ professionals and peers.

TECHNICAL SKILLS

Languages: Python, Java, C#, Typescript, JavaScript, HTML, CSS, SQL, MATLAB, R
Frameworks: React, .NET, MySQL, Unity, JUnit, Jupyter
Tools: AWS (RDS, EC2), GCP (Virtual Machine), Git, Docker, Redux

AWARDS

Wisconsin-Dairyland Programming 2023 Competition Winner — Apr 2023

- Placed 1st out of 71 teams.
- Solved coding problems related to amino acid structures, statistical algorithms, and encryption.
- Employed coding concepts such as data structures, dynamic programming, and search algorithms.

Future Business Leaders of America Nationals — Computer Applications 5th Place (2023), Business Management 4th Place (2022).
National Merit Scholarship Program — National Merit Finalist (2023).
State of Wisconsin Higher Educational Aids Board — Academic Excellence Scholarship Winner (2023).
Varsity Boys High School Tennis — Team State 2nd Place (2023), 3rd Place (2022), Individual State 4th Place (2023).