Jonathan Kim

Madison, WI | jonathankim717@gmail.com |linkedin.com/in/jonathankim717

EDUCATION

University of Wisconsin-Madison, School of Letters and Science   May 2026
- **Bachelor of Science,** Majors in Computer Science and Data Science | GPA: 4.00/4.00
- Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming, Data Science Modeling, Linear Algebra

Middleton High School   June 2023
- GPA: 4.00/4.00
- Relevant Coursework: AP Computer Science A, AP Calculus AB, AP Calculus BC, Game Design, Foundations of Programming

EXPERIENCE

Full Stack Engineer — Szczykutowicz Lab, University of Wisconsin-Madison   Oct 2023 – Present
- Construct databases using mySQL by implementing 5,000+ configurations for CT scanning protocols.
- Create GUI in MATLAB for optimizing scanning protocols, enabling user views and edits.
- Develop optimization workflows, reducing scan times and radiation doses by 50%.

Frontend Engineer — Dietram Scheufele, University of Wisconsin-Madison   Oct 2023 – Present
- Rework information architecture and UI via custom CSS and plugins to streamline user experience.
- Develop professional website using WordPress, featuring novel publications and personal achievements.

Computer Programming Tutor — Code Ninjas, Madison, WI   Apr 2021 – Apr 2023
- Educated 100+ students ages 5-14 about JavaScript, Lua, and Python.
- 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 that targeted weaknesses and strengths in the user's games, 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

Python, Java, HTML, CSS, JavaScript, SQL, MATLAB, R, Linux, C#, Agile Methodology, Scrum, GitHub

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).