

# 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: 3.87/4.00
- Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming, Artificial Intelligence, Data Science Modeling, Linear Algebra, Discrete Math, Computer Engineering, Machine Organization and Programming, Advanced Statistics

## EXPERIENCE

**Software Engineer Intern** — Direct Supply, Milwaukee, Wisconsin

May 2024 – Aug 2024, May 2025 – Aug 2025

- Contributed to core engineering workflows for enterprise web systems, deploying new features through automated CI/CD pipelines.
- Developed cross-platform mobile features in Kotlin and Swift, supporting critical communications for 50K+ active users.
- Built real-time data interfaces with React and RTK Query and improved SQL stored procedures, increasing throughput by 50%.
- Collaborated across product, QA, and DevOps to ship stable releases in fast-paced Agile sprints using Docker and Git.

**Full Stack Engineer** — Szczykutowicz Lab, University of Wisconsin-Madison

Oct 2023 – Present

- Engineered cloud-integrated databases with MySQL and AWS (EC2, RDS) to manage and process high-volume medical imaging data.
- Developed automation and optimization software in Python and MATLAB, improving protocol processing by over 50%.
- Built custom GUIs and backend tools for multi-disciplinary teams working on high-precision imaging workflows.
- Applied systems engineering skills to enhance software robustness and resilience in research-grade instrumentation environments.

**Computer Programming Tutor** — Code Ninjas, Madison, WI

Apr 2021 – Apr 2023

- Taught Python and JavaScript to over 100 students, emphasizing logic, debugging, and modular programming techniques.
- Developed custom lesson plans to simulate real-world engineering projects in a team-focused learning environment.

## PROJECTS

**Carpool Optimizer**

Feb 2025 - Mar 2025

- Built a Python tool for route optimization and communication scheduling for UW Club Tennis, supporting 100+ users.
- Used Pandas and optimization algorithms to reduce mileage by 25% and travel time by 70%.
- Integrated Google Maps API and designed a CLI to visualize route efficiency metrics in real time.

**Chess Assistant Analyzer Bot**

Jun 2023 – Jul 2023

- Created an offline Python application to analyze 100K+ chess games; integrated statistical feedback and animated UI using Tkinter.
- Applied NumPy and Pandas for deep positional evaluation and trend analysis, improving user performance by 20%.

**Team Game Development**

Sep 2022 – Jun 2023

- Designed a Unity-based puzzle platformer in C# as project lead; implemented version control and Agile planning.
- Presented game architecture and design decisions at university engineering fair to over 100 attendees.

## TECHNICAL SKILLS

**Languages:** Python, C, Java, JavaScript, C#, Kotlin, Swift, SQL, MATLAB, R

**Systems/Tools:** Linux, Git, Docker, AWS (EC2, RDS), Jupyter, MySQL

**Frameworks:** React, RTK Query, Unity, .NET

**Concepts:** CI/CD, Automation, Distributed Systems, Systems Integration, Agile, Performance Tuning

## AWARDS

**Wisconsin-Dairyland Programming Competition** – 1st of 71 teams (2023)

**FBLA Nationals** – Computer Applications 5th (2023), Business Management 4th (2022)

**UW Club Tennis** – National Champs 11th (2025), Colorado Classic 3rd (2024)

**WI Academic Excellence Scholarship** – State of Wisconsin (2023)