Drake Bartolai

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EDUCATION

University of Illinois at Urbana-Champaign — Champaign, IL
B.S. in Computer Engineering, Hoeft Technology and Management Minor — *Graduating in May 2027*
ECE Department Alumni Scholarship Recipient — *Spring 2025*
Computer Systems Engineering | *OS Programming in Assembly and C* — Fall 2025
Probability with Engineering Applications | *Probability Theory, Statistics* — Fall 2025
Data Structures and Algorithms | *C++, Git, Docker* — Spring 2025

WORK EXPERIENCE

iD Tech Camps — June 2025 – August 2025
Lead Instructor — *Lake Forest, IL*
- Led a team of 6 instructors, coordinating daily operations and ensuring high-quality delivery of STEM curriculum to 200+ students aged 10–17
- Taught hands-on courses in Python, C++, and robotics, improving students' programming and engineering fundamentals
- Collaborated with my director and regional manager to increase parent satisfaction and optimize the student experience

University of Illinois Physics Dept. — August 2024 – December 2024
Learning Assistant, PHYS 212 — *Champaign, IL*
- Facilitated weekly lab sessions, guiding 40+ students through experiments using electrical and magnetic equipment
- Supported graduate TAs by providing one-on-one mentorship, bridging communication between students and faculty
- Collected student feedback and conducted interviews; results were adopted by the department to improve lab structure

Acannability — April 2024 – August 2024
Web Development Intern — *Chicago, IL*
- Engineered an interactive "periodic table of molecules" to improve user readability and engagement, consolidating data from 50+ molecules
- Designed product features improving engagement and readability, contributing to $10k in raised capital
- Worked directly with entrepreneurs and executives to align technical deliverables with business goals

ENTREPRENEURSHIP

classMate | *TypeScript (React.TS), Java (Spring Boot), Postgres, Docker* — August 2025 - Present
- Designed and deployed a full-stack SaaS platform for students, integrating a TypeScript frontend, Spring Boot API, and PostgreSQL backend
- Implemented OpenAI-powered quiz generation and user-specific study planning, leveraging spaced repetition algorithms
- Built scalable user data models and scheduling logic to support long-term vision of an academic productivity ecosystem

Bartolai Test Prep | *Personal Brand, Professionalism* — August 2021 - Present
- Founded and scaled a tutoring business, designing client management processes to track student progress
- Developed tailored study strategies that resulted in 100% placement of students into top-choice high schools & colleges

LEADERSHIP

UIUC Sports Analytics Society — January 2025 - Present
Technical Project Director — *Champaign, IL*
- Led development of sports prediction engines using logistic regression and proprietary gradient boosted models
- Utilized python libraries to scrape historical data from sites like ESPN and Pro Football Reference
- Integrated sportsbook APIs to deliver real time data and odds tracking

UIUC Technology Management Student Org — July 2025 - Present
Junior Board Member — *Champaign, IL*

SKILLS

Frameworks & Dev Tools | *Spring Boot, React.TS, FastAPI, NumPy, Postgres, Docker, scikit-learn, Vercel, Railway, AWS*
Languages | *Java, TypeScript, Python, SQL, C++, C, Assembly (RISC-V)*