

Yale Gray

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Education

University of Oklahoma – Bachelor of Science in Computer Science, Minor in Mathematics Expected May 2027

- GPA: 3.88
- Relevant Coursework: Data Structures and Algorithms, Discrete Structures, Operating Systems, Database Management Systems, Algorithm Analysis, Applied Statistics, Software Engineering

Work Experience

Software Development Engineer in Test, Paycom - Oklahoma City, OK May 2025 – Aug 2025

- Sole intern contributor to IWant, Paycom's new AI automation product, performing automation of preliminary testing on 100+ test cases, ensuring a successful launch
- Built and maintained automated regression tests using internal tools, improving test efficiency and contributing to faster, more reliable software releases and hotfix turnarounds
- Designed thorough test plans after conducting research on new features and modules, validating expected behaviors across several modules

Undergraduate Teaching Assistant, University of Oklahoma – Norman, OK Jan 2026 – Present

- Collaborate with the course professor to organize course materials, plan assignments, and grade coursework and coding assessments for CS 2813: Discrete Structures
- Hold office hours to support students in mastering discrete mathematics topics, reinforcing problem-solving and conceptual understanding

Athletics Student Tutor, University of Oklahoma Athletics Department – Norman, OK Jan 2025 – Present

- Provide individualized and group tutoring to student-athletes in Developmental Math, College Algebra, Calculus I & II, and Discrete Math, reinforcing core concepts and problem-solving techniques
- Collaborate with academic advisors and coaching staff to track student progress, ensuring NCAA compliance and maintaining eligibility through structured math support

Math Center Student Tutor, University of Oklahoma Math Department – Norman, OK Sep 2025 – Present

- Provide one-on-one and group tutoring in College Algebra, Pre-Calculus & Trigonometry, Introductory Algebra, and Calculus, reinforcing vital mathematical concepts and problem solving skills
- Adapt explanations to diverse learning styles, enabling a safe and prosperous learning environment across varying levels of proficiency

Projects

Pantry Pilot Web App – Java, Docker, MariaDB, OpenAI API

- Built a full-stack, AI-assisted web application enabling users to generate personalized recipes and grocery lists, track nutritional macros, and manage pantry inventory based on budget, dietary preferences, and available ingredients
- Collaborated with a team of developers using GitHub for version control, issue tracking, and CI/CD integration to streamline deployment and maintain code quality
- Designed modular architecture with a Java backend, Dockerized deployment, and MariaDB for persistent data storage, and integrated OpenAI API for recipe generation

Park Database System – Java, SQL, JDBC

- Designed a multi-entity relational database for a National Park Service style system, implementing normalized schemas, referential integrity, and efficient indexing strategies to support high volume queries
- Developed robust stored procedures in T SQL for inserting, updating, and retrieving ranger teams, visitors, researchers, donations, and permit records, ensuring consistent data validation and error handling across the system
- Built a full Java JDBC interface that connects to the database, executes parameterized queries, and displays structured results, providing a functional prototype for a complete CRUD based administrative management tool

Skills

Languages: Java, C++, C#, R, Python, JavaScript, HTML/CSS

Tools: Selenium, Docker, Git, Jira, Office 365

Involvement

Campus Organizations: Computer Science Student Board (Member), Artificial Intelligence Organization (Member), Hacklahoma Hackathon (Participant)