Avikar S. Khakh

khakas22@wfu.edu • (516) 673-8568
https://github.com/AvikarKhakh • https://www.avikarkhakh.com/

EDUCATION

Wake Forest University, Winston-Salem, NC *May 2026*
Bachelor of Science in Computer Science; Minor in Economics

- **Relevant Coursework**: Data Structures & Algorithms, Machine Learning, Software Engineering, Computer Vision
- **Languages:** English (fluent), Spanish (conversational), Punjabi (conversational)

TECHNICAL SKILLS

Languages: Java, Python, C, JavaScript
Frameworks & Libraries: Spring Boot, Angular, React, Tailwind CSS
Data & Tools: SQL, R/Rstudio, Apache Kafka, Maven
Platforms: Microsoft Azure (OpenAI, Cosmos DB)
Additional Tools: Git, GitHub, REST APIs

PROFESSIONAL EXPERIENCE

NYC Administration for Children's Services (ACS), *Software Development Intern* New York, NY, *Summer 2025*

- Improved knowledge search across agency documents by integrating Azure OpenAI into backend controllers, building APIs that connected to a large language model (LLM) and supported retrieval-augmented generation (RAG)
- Enhanced Angular frontend components to improve UI responsiveness by 30% and reduce average page load times by 1.2s, resulting in a more efficient workflow for 200+ internal staff
- Designed and tested user-facing features informed by UX feedback, resulting in a 15% reduction in navigation errors and improved caseworker task completion speed
- Optimized backend API endpoints, reducing query response times by 15% and improving scalability.

JPMorgan Chase & Co., *Software Engineering (Forage)* Remote, *Spring 2025*

- Improved backend reliability in a Spring Boot microservices architecture by completing a 4-task simulation that replicated enterprise banking workflows, resulting in exposure to production-grade development practices
- Eliminated transaction processing errors by integrating Apache Kafka to stream and deserialize 500+ mock financial transactions in real time, ensuring 100% accuracy in embedded test environments
- Reduced transaction latency by ~25% by restructuring service logic and optimizing Kafka consumer modules, resulting in faster and more efficient financial data handling

PERSONAL PROJECTS

XRP Robotics, *Project Lead*

- Assembled and programmed 5 XRP robotic kits using Python to autonomously follow a spontaneous line and have obstacle detection; Utilized ultrasonic and reflectance sensors for real-time navigation; refined accuracy by 30% through sensor tuning and test loops

Authoring Assistant, *Project Lead*

- Developed a Java based authoring tool with user-customizable text formatting features using ArrayLists and StringBuilder; Enabled real-time preview and editing for input of up to 1,500 characters

LEADERSHIP EXPERIENCE

Robotics Organization, *President* Winston-Salem, NC, *Fall 2024 – Present*

- Engineered software for XRP robotics competitions using Java and Python; improved robot pathfinding by 30% using real-time sensor data and if-else logic structures
- Facilitated the planning and execution of events, including competitive tournaments and community outreach programs; oversaw the coordination of club activities, along with budgeting and managing financial responsibilities

Old Gold and Black Newspaper, *Writer* Winston-Salem, NC, *Fall 2022 – Present*

- Composed 10 analytical and engaging articles on school sporting events and in-depth analyses using research and statistical information, often comparing team and player performance metrics, under tight deadlines

Campus Kitchen, *Volunteer* Winston-Salem, NC, *Fall 2023 – Present*

- Collaborated with teams of 3-4 to efficiently prepare, packages and distribute 30-35 meals weekly to individuals in need, exemplifying a strong commitment to community service and teamwork while addressing food insecurity