DARSH CHAURASIA

1221 East Apache Boulevard, Tempe, Arizona 85281

darshchaurasia.com

Education

Arizona State University

Expected May 2026

Bachelor of Science in Computer Science, Minor in Data Science (GPA: 3.94)

Tempe, AZ

- Extracurriculars:
 - * Co-Founder and Vice Chair ACM Student Chapter at ASU
 - * Vice President of Operations The AI Society at ASU
 - * Special Events Developer The Software Developers Association at ASU (SoDA)

Relevant Coursework

- Data Structures and Algorithms
- Applied Linear Algebra
- Computer and Network Forensics
- Distributed Software Development
- Statistical Modeling and Inference
- Computer Networks

- Mobile Application Development
- Artificial Intelligence
- Machine Learning in Data Science

Experience

Subject Area Tutor

Aug 2024 - Present

Arizona State University

Tempe, AZ

- Improved performance for 478 students, reducing repeat visits by 46% through targeted tutoring in programming.
- Boosted code efficiency through mathematical reasoning and architecture, increasing problem solving speed by 35%.
- Optimized analytical problem-solving via 408 hours of instruction, reducing data science assignment rework by 20%.

Undergraduate Student Researcher

Jan 2025 – May 2025

Arizona State University

Tempe, AZ

- Reduced traffic prediction error to 102 vehicles per hour using an AI-based control system with Internet of Things data.
- Trained a LSTM model on traffic data from 40 cities using Python and TensorFlow, achieving real time predictions.
- Optimized traffic signal timing with reinforcement learning, achieving real world validation and scalable deployment.

Project Experience

Campus Retrace iOS App | Swift, SwiftUI, SwiftData, MapKit, CoreLocation, REST API

GitHub

- Built a lost item app with MVVM architecture, enabling CRUD operations and reducing data retrieval time by 40%.
- Enhanced tracking and retrieval with geo-tagging, full-screen maps, and filtering tools, reducing search time by 55%.

Library of Things Web Application | ASP.NET Web Forms, C#, XML, WCF Services, Custom DLLs

GitHub

- Built a cart based borrowing system with checkout, and XML-backed due-date tracking for data management.
- Improved security with CAPTCHA, login, and personalized borrowing history, eliminating unauthorized checkouts.
- Reduced manual processing time by 40% with role-based inventory, account control, and overdue tracking.

Face Recognition Attendance System | Python, OpenCV, TensorFlow, PostgreSQL

GitHub

- Automated real-time attendance with CNN-based face recognition and Haar cascades, reducing check-in time by 80%.
- Enhanced facial encoded data storage in PostgreSQL, improving query speed and data integrity for attendance logging.

Chain of Custody Blockchain Tool | Python, Blockchain, Command-Line Interface

GitHub

- Built a blockchain CLI for evidence tracking, ensuring auditable chains of custody with near-zero data corruption.
- Enabled secure lifecycle management with UUID-based tracking for add, check-in, check-out, and removal.
- Maintained data integrity with AES encryption, block verification, and binary storage, ensuring tamper proof records.

Technical Skills

Languages: Python, R, Java, C, C++, C#, HTML, CSS, SQL, JavaScript, TypeScript, Swift, Golang

Frameworks and Libraries: React, React Native, Next. is, Angular, Flask, Node. is, JavaFX, Tailwind CSS, Scikit-learn,

Pandas, NumPy, JUnit, Selenium, .NET

Databases: PostgreSQL, MongoDB, MySQL, SQLite, Firebase

Tools: Git, Postman, Docker, Figma, AWS Cloud (EC2, S3, SageMaker Studio, Bedrock), Jupyter Notebook, Android Studio, Jenkins, Gemini API, Linux, Tableau, Advanced Excel