

# Tuqa Yacoub

470-469-0266 | [yacoubtuqa@gmail.com](mailto:yacoubtuqa@gmail.com) | [tuqayacoub.com](http://tuqayacoub.com) | US Citizen

## EDUCATION

---

### Georgia Institute of Technology

Atlanta, Georgia

*Bachelors of Science in Computer Science (GPA: 3.9)*

May 2026

- **Coursework:** Data Structures and Algorithms, Objects and Design, Systems and Networks, Databases

## EXPERIENCE

---

### Georgia Institute of Technology – Vertically Integrated Projects

Atlanta, Georgia

*ACT Driving Simulator Software Engineer*

Aug. 2024 – Present

- Spearheading the back-end development of a state-of-the-art real-time driver status monitoring system, integrating innovative multi-modal data to enhance driver behavior analysis and accident detection.
- Pioneering the fusion of advanced video and audio distraction detection models by leveraging TensorFlow, PyTorch, and Computer Vision techniques, driving innovation and pushing the boundaries of driver safety technology.
- Collaborated with cross-functional teams to integrate distraction detection insights into a real-time driver monitoring system, aiding in accident prevention and behavior analysis.

### Pegasus Auto

Atlanta, Georgia

*Software Engineering Intern*

May. 2024 – Aug. 2024

- Developed a robust web scraper to automate the collection of car prices from auction websites and compared them to market prices, identifying the best deals and reducing manual data collection by nearly 80%
- Optimized filtering algorithms to identify the best deals based on price differences, significantly enhancing the dealership's ability to source inventory at competitive rates while also reducing decision-making time.
- Utilized Python libraries such as BeautifulSoup, Selenium, and Pandas to extract, process, and analyze data, enabling efficient decision-making for car purchases.

## PROJECTS

---

### MERN Stack Recipe Web App | *MongoDB, Express.js, React, Node.js, JWT, REST API*

- Developed a full-stack web app using Express.js for managing a database of over 20,000 recipes.
- Implemented secure JWT-based authentication, enabling secure user login and personalized recipe saving.
- Engineered advanced search functionality, allowing users to effortlessly find recipes by ingredients, titles, or authors, enhancing discoverability and user engagement.

### myCabinet: Virtual Medicine Cabinet | *Java, MySQL, AWS Lambda, AWS S3, Android Studio, Figma*

- Developed a virtual medication management app using Java, with a focus on streamlined user interactions.
- Engineered a MySQL database that enables users to add, view, and track their medication schedules.
- Implements features for inputting medication details, setting up reminders, and managing a medication list.

### Personal Portfolio | *React, Bootstrap, HTML/CSS, JavaScript*

- Crafted a visually captivating and responsive personal portfolio using Bootstrap, showcasing projects, skills, and professional achievements with a sleek and modern design.
- Implemented dynamic animations and responsive layouts, ensuring a seamless user experience across all devices.
- Designed an interactive contact section with form validation, enabling visitors to easily reach out and connect.

### Birth Rate Analyzer | *Python, Pandas, SQL, JavaScript, HTML/CSS*

- Engineered an automated system using Python and Pandas for seamless import and processing of hospital data.
- Developed an intuitive JavaScript-based interface, with HTML/CSS for easy access to birth rates by race, spanning from the year 2000 onward, and supporting custom date range averaging.
- Implemented advanced trend detection algorithms in Python to uncover significant shifts in birth rate trends.

## SKILLS

---

**Languages:** Java, Python, JavaScript, C, SQL, Assembly, HTML/CSS

**Tools:** React, Next.js, Node.js, Express.js, Django, REST API, Git, OpenAI, Bootstrap, Tailwind, Vercel

**Cloud Services/Databases:** MongoDB, MySQL, AWS S3, AWS Lambda