# RAKSHITH REDDY MUDIGOLAM

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### **EDUCATION**

B. S - Computer science May 2026

Arizona State University, Tempe, AZ

4.0 GPA

3X Dean's List, New American University Scholarship Holder

TECHINCAL SKILLS

Communication: Salesforce, Slack, Discord, Dropbox, Drive MS Office: Word, Excel, PowerPoint, Outlook

**Programming:** Java, Python, C, C++, Java Script, HTML, CSS, R, MATLAB, Prolog, Scheme

Design and Modeling Tools: Filmora, Adobe Premiere Pro, OBS, Studio 2.0-Bricklink

**PROJECTS** 

### **Automotive Performance Analysis: Predicting Vehicle Fuel Efficiency**

**April 2024** 

- Developed a machine learning pipeline to predict vehicle fuel efficiency, achieving an R<sup>2</sup> score of 0.972 using RandomForestRegressor.
- Conducted data preprocessing, feature engineering, and exploratory data analysis using Python, pandas, numpy, seaborn, matplotlib, and scikit-learn.

### **Amazon Sales and Profit Trend Analysis**

February 2024

- Conducted exploratory data analysis to identify key sales and profit trends, utilizing R (ggplot2, dplyr).
- Developed and evaluated predictive models (Linear Regression, Neural Networks, Elastic Net, Random Forest), achieving high accuracy with an R-squared value of 0.85 using Random Forest.

### 2023 Vietnam Substantial Shrimp Farming - Engineering Projects in Community Services

December 2023

- Collaborated effectively within a 17-member team, actively participating in over 50 weekly meetings and contributing to Agile-driven roadmaps, resulting in a significant 20% increase in project efficiency compared to previous semesters.
- Applied expertise in HTML, CSS, PHP, and JavaScript to develop a compelling homepage and optimize the 'Contact Us' section of the website, enhancing user experience and functionality.

### **Autonomous Lego Car Project**

May 2023

- Led a team project to develop a sophisticated Lego car capable of autonomous navigation through complex city mazes, including the ability to detect red lights and ensure passenger safety.
- Demonstrated strong leadership by overseeing the programming of the vehicle's operational code using MATLAB, highlighting technical expertise and effective team coordination.

# WORK EXPERIENCE

# Registration and Recruitment Assistant, Arizona State University

March 2024 - Present

- Carried program registration process for E2 by guiding participants through registration forms, ensuring accuracy, and troubleshooting any issues through salesforce.
- Respond promptly to inquiries related to program registration, providing detailed information about registration process, deadlines, etc.

### Math Instructional Aide, Arizona State University

August 2023 - Present

- Tutored over 400 students in overcoming math-related challenges by breaking down complex problems into manageable steps.
- Established rapport with students, creating a healthy learning environment through a simplified teaching approach.

### Lab Aide, START Therapy Neuro-Mobility Research lab

August 2023 - February 2024

- Analyzed spasticity in stroke participants, conducting assessments including ARAT and Fugl-Meyer tests.
- Contributed to ongoing research on neuro-mobility, demonstrating a commitment to advancing scientific understanding.

# RESEARCH INVOLVEMENT / HACKATHONS

### **FutureG - Future Generation Wireless Technology**

May 2024

Participated in a five-day FutureG Summer Research Camp at Arizona State University, hosted by the DOD Center of
Excellence in Future Generation Wireless Technology. Gained hands-on experience in wireless communications
technologies, including cybersecurity, signal processing, and AR/VR systems. Engaged with leading faculty and industry
experts, enhancing my understanding of cutting-edge advancements in wireless network technology and its applications. This
program reinforced my passion for engineering and inspired me to pursue further research in the field.

Finding FRED April 2024

• Participated in the STEAM Hackathon at the ASU Chandler Innovation Center, securing 2nd place in the room with a teambased chain-reaction machine project to unravel the disappearance of the Friendly Robotic Engineer Droid (F.R.E.D.).