

# Seran Gemechu

[Sdiriba33@gmail.com](mailto:Sdiriba33@gmail.com) | (408)-858-9537 | San Jose, CA | [seran72.github.io/Gemechu](https://seran72.github.io/Gemechu)

## COURSEWORK

- OOP, Data Structures & Algorithms, AI/Machine Learning, Computer Architecture, Operating Systems
- App Dev, Cybersecurity, DBMS, Computer Organization, Computing Theory, Software Engineering

## TECHNICAL SKILLS

- Java, Python, C, JS, x86 Assembly, Verilog, React JS, SQL, HTML, CSS, Confluence
- TensorFlow, AWS, Google Colab, Scrum, JIRA, GitHub, Eclipse, VS code
- Linux, Windows, MacOS, VMware/VirtualBox, Wireshark, CI/CD, Networking (DNS, TCP/IP)

## WORK EXPERIENCE

<b>Resident Advisor</b>	<b>Sacramento State University, Sacramento, CA</b>	<b>Aug 2021 – Present</b>
<ul style="list-style-type: none"><li>• Develop a positive living environment for campus residents, often resolving conflicts.</li><li>• Create, market, and lead student centered hall programs to promote social, education, diversity.</li><li>• Enforce all College Living policies, promoting academic excellence, and encouraging involvement.</li></ul>		
<b>Apple Repair Technician</b>	<b>Experimax, San Jose, CA</b>	<b>Jan 2020 – Feb 2021</b>
<ul style="list-style-type: none"><li>• Assisting customers</li><li>• Troubleshooting software and hardware issues on all Apple products; Data Recovery, Malware Analysis, LCD/battery replacement...etc.</li></ul>		
<b>IT Advisory Board</b>	<b>Sacramento State University, Sacramento, CA</b>	<b>Aug 2018 – May 2019</b>
<ul style="list-style-type: none"><li>• Provided special consultation to the Vice President for IT &amp; Chief Information Officer.</li><li>• Attended weekly meetings to discuss and suggest influencing ideas to solve issues revolving on campus technology equipment.</li></ul>		

## SOFTWARE PROJECTS

### Web Development

- Developed a personal website using React Js, Node Js, HTML and CSS. Hosted it via GitHub.
- *Utilized:* Git, UI

### Yelp Business Star Rating Prediction AI

- Developed a machine learning model to parse the reviews of businesses and predict star ratings with 93% accuracy.
- *Utilized:* TensorFlow, Keras, Jupyter; Regression and Classification Algorithms

### AI-based Network Intrusion Detection System

- Developed a machine learning model to detect and protect a computer network by filtering out bad connections and keeping the good ones through predictive learning. (**Accuracy Achieved: 98%**)
- *Utilized:* Python, TensorFlow, Keras, Google Colab, Neural Network, Logistic Regression

### Vehicle Classification AI

- Developed vehicle classification deep learning model using CNN and transfer learning with accuracy, precision, and recall-score all above 0.70 on the validation set.
- *Utilized:* VGG16, Stanford Cars Dataset, Linear PCA, Data pre-processing, EfficientNet B1

### Store Item Price Teller

- Developed a program that takes large number of encrypted code39 barcode binary numbers that contain grocery item name and a price for each specific item.
- Decrypts and converts the binaries into human and computer readable ASCII characters. Returns item name and total price to the client server.
- *Utilized:* Data structures: Arrays, HashMap, Stacks, Array Lists, JAVA, XML

## EDUCATION

<b>California State University Sacramento</b> – Sacramento, CA	<b>Expected Graduation:</b> Fall 2022
<ul style="list-style-type: none"><li>• Bachelor of Science in Computer Science</li><li>• Dean's Honor List</li></ul>	