

**Candidate:** Gurudevi Lavanya Gopisetty

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## 1. Personal & Academic Overview

- **Full Name:** Gurudevi Lavanya Gopisetty
- **Date of Birth (DOB):** june 10 , 1999
- **Location:** Long Beach, California, USA
- **Email:** gglavanya06@gmail.com
- **Phone:** +1 (669) 306-3851

### Education

- **Master's Degree:** M.S. in Computer Science
  - **University:** California State University
  - **Expected Graduation:** December 2025
  - **Cumulative GPA:** 3.909 / 4.0
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## 2. Professional Role Readiness

The candidate is capable of working in the following roles:

- Data Scientist
  - Machine Learning Engineer
  - AI Engineer
  - Applied Machine Learning Engineer
  - Software Engineer (ML / Data Focus)
  - Generative AI Engineer (Entry–Mid Level)
  - Data Analyst (Advanced / Technical)
  - Computer Vision Engineer (Junior–Mid Level)
  - NLP Engineer (Junior–Mid Level)
  - QA Automation Engineer / SDET
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### **3. Projects Portfolio (Detailed & Role-Aligned)**

#### **1. Automatic Attendance System**

**Domain:** Computer Vision, Face Recognition

**Brief Description:**

Developed an automated attendance system using face recognition to identify individuals and mark attendance without manual intervention. The system processes facial features from live or stored images and matches them against registered identities.

**Technologies & Tools:**

- Python
- OpenCV
- Face recognition / deep learning models

**Skills Demonstrated:**

- Image preprocessing and feature extraction
- Computer vision pipelines
- Real-world automation using AI

**Role Alignment:**

- Computer Vision Engineer
  - AI Engineer
  - Software Engineer (AI Systems)
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#### **2. Semantic Segmentation for Self-Driving Cars**

**Domain:** Computer Vision, Deep Learning

**Brief Description:**

Implemented a semantic segmentation system for self-driving cars to classify each pixel in a scene (road, vehicles, pedestrians, lanes). The system improves real-time scene understanding for autonomous navigation.

**Technologies & Tools:**

- Python
- TensorFlow
- OpenCV

**Skills Demonstrated:**

- CNN-based segmentation models
- Real-time vision processing
- End-to-end ML pipeline design

**Role Alignment:**

- Machine Learning Engineer
  - Computer Vision Engineer
  - AI Engineer
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### 3. Automatic Grammar Evaluator

**Domain:** Natural Language Processing (NLP)

**Brief Description:**

Built an automatic grammar evaluation system to assess grammatical correctness in text. The system analyzes sentence structure and language patterns to identify errors and provide scoring or feedback.

**Technologies & Tools:**

- Python
- NLP techniques
- Transformer-based models (conceptual and applied)

**Skills Demonstrated:**

- Text preprocessing and NLP pipelines
- Language modeling concepts
- Practical application of NLP theory

**Role Alignment:**

- NLP Engineer
  - Data Scientist
  - Generative AI Engineer
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### 4. Automatic Car Parking System

**Domain:** Computer Vision, Object Detection

**Brief Description:**

Designed an intelligent parking management system that detects available parking slots using object detection and provides a web-based interface for visualization and booking.

**Technologies & Tools:**

- YOLOv8
- OpenCV
- Python
- Flask

**Skills Demonstrated:**

- Object detection and real-time inference
- API development and system integration
- Performance-optimized AI systems

**Role Alignment:**

- Machine Learning Engineer
  - AI Engineer
  - Software Engineer (AI-based Systems)
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## 5. Machine Learning Models Worked With

**Domain:** Machine Learning & Deep Learning

**Brief Description:**

Worked extensively with multiple ML and DL models across supervised, unsupervised, and deep learning paradigms for prediction, classification, and recognition tasks.

**Models & Techniques:**

- Linear Regression
- Logistic Regression
- Decision Trees
- Random Forest
- Support Vector Machines (SVM)
- K-Means Clustering
- Convolutional Neural Networks (CNNs)
- Siamese Neural Networks
- Transformer-based models (BERT)

**Skills Demonstrated:**

- Model selection and evaluation
- Feature engineering
- Bias-variance tradeoff understanding

**Role Alignment:**

- Data Scientist
  - Machine Learning Engineer
  - AI Engineer
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## 6. Temple Run Game Handler

**Domain:** Software Engineering, Logic & Automation

**Brief Description:**

Developed a logic-based handler for the Temple Run game to manage game flow, actions, and decision logic. Focused on programmatic control and state handling.

**Technologies & Tools:**

- Python / Java (logic-based implementation)

**Skills Demonstrated:**

- Algorithmic thinking
- State management
- Software logic design

**Role Alignment:**

- Software Engineer
  - Game Logic / Systems Developer
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## 4. Technical Skills & Technologies

### Programming Languages

- Python, Java, C, SQL, Bash, HTML/CSS

### Data Science & Visualization

- Pandas, NumPy, Scikit-learn
- Matplotlib, Seaborn, Plotly

## Machine Learning & AI

- TensorFlow, PyTorch
- BERT, YOLOv8, Transformers
- OpenCV

## Generative AI

- Transformer models
  - Diffusion models
  - OpenAI APIs
  - Hugging Face APIs
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## 5. Problem-Solving & Coding Proficiency

### LeetCode Proficiency

- Completed **Blind 75** problem set
- Completed **Top SQL 50** problems
- Strong command over:
  - Data Structures
  - Algorithms
  - SQL queries
  - Logical problem solving

#### Impact:

Enhances ability to write optimized, clean, and scalable code across all software and ML roles.

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## 6. Certifications & Continuous Learning

### Google Certifications

- **Google Machine Learning Crash Course (Completed)**
- **Google NumPy Course (Completed)**
- Completed all modules under Google ML Crash Course program

### **Key Takeaways:**

- Strong applied understanding of ML fundamentals
  - Mathematical intuition behind models
  - Best practices for real-world ML systems
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## **7. Theory-to-Practice Alignment**

### **Academic Knowledge**

- Data Structures & Algorithms
- Operating Systems
- Finite Automata
- Machine Learning
- Deep Learning
- Artificial Intelligence
- Probability & Statistics

### **Practical Impact**

- Enables faster debugging and optimization
  - Improves correctness of AI/ML models
  - Supports scalable and maintainable system design
  - Allows confident transition across AI, ML, and software roles
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## **8. Final Role Readiness Summary (RAG-Optimized)**

The candidate is capable of working in roles that involve:

- Machine learning and deep learning model development
- Computer vision and NLP systems
- Generative AI experimentation and integration
- Data analysis and predictive modeling
- Software engineering with strong algorithmic foundations
- Automation, testing, and AI-driven system design

The combination of **strong theoretical grounding, diverse project experience, and continuous learning** makes the candidate adaptable, reliable, and effective across modern AI-driven roles.

