

# SecureData Financial Corp. - Interview Report

## Role: Graduate Software Engineer

**Candidate:** Candidate

**Date:** 2025-04-11 08:35

**Interviewer:** Alexi

**Interview ID:** 3fb09541e50b

### Overall Performance Summary

Average Score: N/A (no valid scores)

Average Confidence: N/A (no valid analyses)

### Detailed Question & Answer Evaluation

#### Turn 0: Question

Initial Greeting / Ready Check

#### **Candidate Response:**

*[STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_0\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_0\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.*

#### **Evaluation:**

*[Text evaluation skipped due to: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_0\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

#### Turn 1: Question

You've worked with both Python and Java. Imagine you're tasked with building a small utility application that needs to be both performant and easily maintainable. What factors would influence your choice of language, and what are the potential trade-offs involved in your decision? Justify your reasoning.

#### **Candidate Response:**

*[STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_1\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_1\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.*

## Evaluation:

*[Text evaluation skipped due to: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_1\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

## Turn 2: Question

Let's say you're given a list of integers representing sensor readings from your Energy-Efficient WSN project. Write a Python function that identifies and returns the three highest readings in the list. Explain your approach, including any considerations for efficiency. (Assume the list might contain duplicates and potentially be very large.)

## Candidate Response:

*[STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_2\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_2\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.*

## Evaluation:

*[Text evaluation skipped due to: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_2\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

## Turn 3: Question

Your team is designing a RESTful API for the Intelligent Fertilizer Recommendation System. Describe how you would design the API endpoints, including the request/response formats (using JSON), and any considerations for scalability and error handling. What are some potential security concerns, and how would you address them?

## Candidate Response:

*[STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_3\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_3\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.*

## Evaluation:

*[Text evaluation skipped due to: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_3\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

## Turn 4: Question

You're working on a Python script that interacts with a PostgreSQL database, and you encounter a "connection refused" error. Describe the systematic steps you would take to diagnose and resolve this issue. What are some common causes of this type of error?

## Candidate Response:

*[STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_4\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

OPUS header `48000`.]

Confidence Analysis Note: Skipped due to STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_4\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.

#### Evaluation:

[Text evaluation skipped due to: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_4\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]

#### Turn 5: Question

Describe a time you had to collaborate with others on a project where there were conflicting opinions or approaches. How did you navigate those differences to reach a consensus and achieve a successful outcome?

#### Candidate Response:

[STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_5\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]

Confidence Analysis Note: Skipped due to STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_5\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.

#### Evaluation:

[Text evaluation skipped due to: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_5\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]

#### Turn 6: Question

The technology landscape is constantly evolving. How do you stay up-to-date with the latest advancements in software development and adapt your skills accordingly? Give a specific example of a new technology or concept you learned recently and how you applied it.

#### Candidate Response:

[STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_6\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]

Confidence Analysis Note: Skipped due to STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_6\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.

#### Evaluation:

[Text evaluation skipped due to: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_6\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]

#### Turn 7: Question

Your resume mentions the "Energy-Efficient WSN Protocol Research" project, resulting in a 30% increase in network coverage. Can you elaborate on the specific technical challenges you faced during the implementation of your novel hybrid-clustering protocol? What were your key contributions to the project, and what did you learn from the experience that you believe would be valuable in a software engineering role at Innovate Solutions Inc.? What were the limitations of your approach, and how might you improve it given more time and

resources?

**Candidate Response:**

*[STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_7\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_7\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.*

**Evaluation:**

*[Text evaluation skipped due to: Error during STT for 31f78457-42dd-47e5-8f61-3fb09541e50b\_turn\_7\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `48000`.]*

## Appendix A: Candidate Resume Text

Karthik Yadav

(cid:131) +91 8143094363 # vkarthikyadav88@gmail.com (cid:239) LinkedIn § GitHub

### Education

Vellore Institute Of Technology, Vellore Expected Graduation: June 2026

Bachelor of Technology in Computer Science Current GPA: 7.44/10

Narayana E-Techno School, Hyderabad Graduated: April 2022

XII Standard

### Skills

Programming Languages: C/C++, Python, Java, R programming

Technologies: Google Cloud, Machine Learning, Deep Learning, Data Science, PostgreSQL, LLM-RAG

Core Competencies: Collaboration, Active Listening, Communication

### Projects

Intelligent Fertilizer Recommendation System | Python, Machine Learning, API 2024

- Developed a machine learning model to recommend optimal fertilizers and farming techniques based on environmental parameters.
- Deployed the model with a user-friendly API to enhance accessibility for farmers and agricultural experts.

Energy-Efficient WSN Protocol Research | Python, Network Simulation 2024

- Co-authored a research paper on a novel hybrid-clustering protocol for Wireless Sensor Networks (WSN).
- Designed and implemented a robust multi-hop communication protocol for wireless sensors, resulting in a 30% increase in network coverage.
- Conducted comprehensive literature reviews and data analyses to support research findings.

AI-Powered News Channel | Web Crawling, React.js, Python, Unreal Engine 2025

- Developed a scalable AI-driven news platform that scrapes and curates personalized news feeds for users.
- Implemented a custom web crawler to extract real-time news articles and classify them based on user preferences.
- Built an interactive frontend using React.js and Tailwind CSS, ensuring a seamless user experience.
- Integrated Unreal Engine for AI avatar-based news anchoring, rendering synchronized facial animations from audio input in realtime.

### Experience

Standards Club VIT Jan 2023 - 2024

Board Member Vellore, India

- Selected as one of the top 10 candidates out of 2000+ applicants for the board member position.
- Coordinated 5 major events, attracting over 1000 attendees and increasing club membership by 25%.
- Launched an entrepreneur outreach program, driving a 30% increase in successful business connections for club members.

VIT Film Society Jan 2023 - 2024

Senior Core Member, Director Vellore, India

- Directed 3 short films, reaching over 11,000 views on social media platforms.
- Trained a team of 15 junior members in scriptwriting, cinematography, and editing.
- Curated a film festival showcasing over 20 student-made short films, drawing more than 300 attendees.

Debate Society VIT Jan 2024 - 2025

Senior Core Member Vellore, India

- Achieved top 3 positions in 5+ debate competitions.
- Mentored 5 junior debaters, enhancing public speaking skills and competition performance by 20%.

- Organized and moderated campus-wide debate events, expanding society membership by 30%.

#### Awards & Achievements

- Awarded Best Speaker, VIT Annual Debate Tournament, Riviera 24, VIT's largest debate competition with 150+ participants 2024.
- Won Best Project in the Media and Entertainment track at DevSoc'25, India's largest student-run hackathon, competing against 140+ teams 2025.

## Appendix B: Job Description Text

Job Title: Graduate Software Engineer

Location: Austin, TX / Remote Option Available

Company: Innovate Solutions Inc.

### About Us:

Innovate Solutions Inc. is at forefront of creating cutting-edge tools for developers. We foster a collaborative environment where learning and growth are paramount. Join our team and help build the future of software development!

### Job Description:

We are seeking highly motivated and talented recent graduates to join our engineering team as Graduate Software Engineers. This is an entry-level position designed for individuals passionate about software development and eager to kick-start their careers. You will receive mentorship from senior engineers, participate in comprehensive training programs, and contribute to real-world projects under guidance.

### Responsibilities:

- Participate in the full software development lifecycle (design, develop, test, deploy, maintain) under the guidance of senior engineers.
- Write clean, well-documented, and testable code in languages like Python or Java.
- Learn and contribute to our existing codebase and infrastructure.
- Assist in debugging and resolving software defects.
- Collaborate effectively with team members, product managers, and designers.
- Participate in code reviews to learn best practices and maintain code quality.
- Document technical specifications and processes.
- Continuously learn new technologies and software development practices.

### Qualifications:

- Bachelor's degree in Computer Science, Software Engineering, or a closely related technical field, completed within the last 12 months.
- Solid understanding of fundamental computer science concepts, including Data Structures, Algorithms, Operating Systems, and Databases.
- Proficiency in at least one object-oriented programming language (e.g., Python, Java, C++).
- Strong analytical and problem-solving skills.
- Excellent communication and interpersonal skills.
- A strong desire to learn, grow, and take initiative.
- Ability to work effectively both independently and as part of a team.

### Nice to Haves:

- Academic projects demonstrating programming skills.
- Basic familiarity with version control systems like Git.
- Exposure to web development concepts (HTML, CSS, JavaScript) or frameworks.
- Basic understanding of cloud computing concepts (AWS, Azure, GCP).
- Familiarity with Linux/Unix environments.
- Contributions to personal projects or open-source communities (e.g., GitHub profile).

### Why Join Us?

- Structured mentorship program.
- Opportunity to work on impactful projects.
- Continuous learning and development opportunities.
- Collaborative and supportive team culture.
- Competitive salary and benefits package for entry-level roles.