

# SecureData Financial Corp. - Interview Report

## Role: Graduate Software Engineer

**Candidate:** Candidate

**Date:** 2025-04-11 10:44

**Interviewer:** Alexi

**Interview ID:** 3f4ee2d2bb50

### 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 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_0\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_0\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.*

#### **Evaluation:**

*[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_0\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]*

#### Turn 1: Question

Imagine you need to choose a database for a new project that requires storing and querying large amounts of sensor data (similar to your WSN project). What factors would you consider when choosing between a relational database like PostgreSQL and a NoSQL database? What are the trade-offs involved?

#### **Candidate Response:**

*[STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_1\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_1\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.*

## Evaluation:

*[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_1\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]*

## Turn 2: Question

Let's say you're working on a Python script for the fertilizer recommendation system and encounter an unexpected `TypeError`. Describe your approach to debugging this error, including the tools and techniques you would use. Assume the error message is not very helpful.

## Candidate Response:

*[STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_2\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_2\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.*

## Evaluation:

*[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_2\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]*

## Turn 3: Question

Design a simplified API endpoint for the Intelligent Fertilizer Recommendation System. What input parameters would you require from the user (farmer/expert)? What data structures would you use to represent the input and the output (recommendation)? Focus on the essential design aspects.

## Candidate Response:

*[STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_3\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_3\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.*

## Evaluation:

*[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_3\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]*

## Turn 4: Question

For example, what if they provide unrealistic values for soil parameters?

## Candidate Response:

*[STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_4\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]*

*Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_4\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig*

must either be unspecified or match the value in the WEBM OPUS header `96000`.

#### **Evaluation:**

[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_4\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

#### **Turn 5: Question**

Could you give a specific example of how you would handle a case where the farmer provides an invalid fertilizer type in their input?

#### **Candidate Response:**

[STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_5\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_5\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.

#### **Evaluation:**

[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_5\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

#### **Turn 6: Question**

You're working on a team project and a teammate's code introduces a bug that impacts the performance of the application. How would you approach this situation to help resolve the issue while maintaining a positive and collaborative team environment?

#### **Candidate Response:**

[STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_6\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_6\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.

#### **Evaluation:**

[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_6\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

#### **Turn 7: Question**

Describe a situation where you had to learn a new technology or programming language quickly. What strategies did you use, and what were the outcomes? Relate this to a situation where you'd need to quickly learn a new framework or technology at Innovate Solutions Inc.

#### **Candidate Response:**

[STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_7\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_7\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.

#### Evaluation:

[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_7\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

#### Turn 8: Question

Describe a time you had to overcome a significant technical challenge in one of your projects. What was the challenge, what steps did you take to address it, and what did you learn from the experience?

#### Candidate Response:

[STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_8\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_8\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.

#### Evaluation:

[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_8\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

#### Turn 9: Question

In your Intelligent Fertilizer Recommendation System project, you mention developing a machine learning model. Can you describe your role in the project, the specific machine learning algorithm you used, and the key challenges you faced in deploying the model as a user-friendly API? What metrics did you use to evaluate the model's performance?

#### Candidate Response:

[STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_9\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

Confidence Analysis Note: Skipped due to STT Error: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_9\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.

#### Evaluation:

[Text evaluation skipped due to: Error during STT for 4ce8e54a-4422-40db-ac5a-3f4ee2d2bb50\_turn\_9\_response.webm: 400 sample\_rate\_hertz `16000` in RecognitionConfig must either be unspecified or match the value in the WEBM OPUS header `96000`.]

## 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.