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## SUMMARY

Software Engineer & Back-end Specialist Results-oriented Engineering undergraduate with a focus on high-performance web systems. Experienced in deploying production-ready APIs using NestJS and TypeScript. Seeking a remote engineering role to solve complex backend challenges.

## PROFESSIONAL EXPERIENCE

### 3D Audio Researcher | LISA-UFRJ (Sep 2025 - Present)

- **Simulation Engineering:** Developing software tools to simulate 3D audio environments using First-Order and Higher-Order Ambisonics algorithms.
- **Applied Engineering:** Applying signal processing techniques to solve challenges in Urban Planning.

### Machine Learning Researcher | GTA-UFRJ (Jul 2024 - Jan 2025)

- **End-to-End Model Ownership:** Independently trained and calibrated security analysis models using Scikit-Learn, achieving 95% accuracy through rigorous hyperparameter tuning.
- **Custom Dataset Creation:** Constructed a proprietary dataset from scratch using Pandas, managing the entire lifecycle from raw data collection to normalization and cleaning.

### Back-end Developer | Fluxo Consultoria (Jun 2023 - Jan 2024)

- **API Architecture:** Led the backend development of a client management system using NestJS, ensuring modularity and scalability.
- **Database Efficiency:** Modeled complex relational data structures in PostgreSQL, utilizing Prisma ORM to enforce strict type safety and data integrity.
- **Agile Delivery:** Translated business requirements into technical specifications (UML), delivering features ahead of schedule in SCRUM sprints.

## KEY PROJECTS

### SnippetVault (Full Stack Web App) Designed and deployed a code snippet management platform.

- **Tech Stack:** NestJS, React, MongoDB.
- **Security:** Implemented JWT authentication to secure user data.
- **Database:** Designed a flexible NoSQL schema using MongoDB to efficiently store variable-length code snippets and metadata.

## TECHNICAL SKILLS

- **Core:** Python, TypeScript, JavaScript, SQL (PostgreSQL & SQL Server), NoSQL (MongoDB).
- **Frameworks:** NestJS (Expertise), Express.js, Next.js, React, Prisma ORM.
- **Engineering Tools:** Docker, Git, UNIX/Linux Systems.
- **Languages:** Portuguese (Native), English (Fluent), German (Intermediate).

## EDUCATION

### B.S. Electronic and Computer Engineering | UFRJ | Exp. Dec 2027 | GPA: 3.3/4.0

- **Coursework:** Data Structures, Algorithms, Control Systems, OOP.