Joao Freza Foltran

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Brasilia, DF, Brazil

Education	**University of Wisconsin, Madison**
	- Bachelor of Science Electrical Engineering, 2019
	- Bachelor of Science Mathematics, 2019
	Cumulative GPA 3.94 out of 4.0

Experience	**Software Engineer, Snow Fox AI, Brasilia, Brazil – Aug 2020 - Present**

- Develop a client-facing API in Python to deliver marketing campaigns to users, and a dashboard in Flask to track ROI, display usage statistics and build marketing campaigns.
- Develop a mobile app with React Native sharing its codebase and design system with a web app for Julius Baer clients to track investment portfolios.
- Maintain the codebase for Julius Baer native mobile apps in Java and Objective C, while analyzing and fixing existing security vulnerabilities.

Software Engineer, DoIT, Madison, WI – Jan 2019 - Aug 2020
- Develop and improve API used by Canvas question engine software to meet network security protocols.
- Resolve database import issues causing downtime in Canvas by importing courses in separate threads.
- Lead consultant team to support large-scale use of Canvas tool, including API configuration and content authoring.

Software Developer, UW-Madison, Madison, WI – Jan 2018 - Oct 2018
- Developed an automated lyric generator that produces new song lyrics based on existing ones.
- Used machine learning and language processing algorithms such as Word2Vec and PhoneticDist to establish meaning and sonority similarity between sentences.
- Deployed application using DynamoDB and Flask.

Teaching Experience	**Teaching Assistant, UW-Madison, Madison, WI – Jan 2018 - Oct 2018**

- Assistant of Professor Felix Liu and Michael Morrow in electric circuits course.
- Assistant of Professor William Sethares and Andreas Velten in signal processing courses.

Coding Skills	**Python**

- Fluent in libraries including boto3, numpy, pandas for data analysis and database management.
- Proficient in designing applications using web frameworks including Flask and Django.

Java
- Fluent in developing Android apps, with experience in low-level classes for audio processing.
- Proficient in developing low-level image processing algorithms in mobile and non-mobile hardware.

Javascript
- Fluent in developing react-native, react and web apps. Proficient in using Angular.
- Fluent in using Node.js and constructing webhooks with AWS lambda.

C/C++
- Proficient in using standard libraries and signal processing libraries including JUCE.
- Proficient in designing real-time audio processing algorithms for embedded hardware.

Objective-C
- Experienced in developing and maintaining iOS apps.
- Experienced in analyzing security vulnerabilities in iOS apps.