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Education

Concordia Univesity Chicago

Bachelor of Science, Computer Science

December 2018

Projects

PyPitch 2018

- PyPitch is a smart musical instrument tuner which recognizes the individual notes of a cord in real-time with 95% accuracy and displays the musical information to the end user.
- Designed and implemented PyPitch using several Python libraries including Tensorflow and Numpy to construct a Neural Network that can analyze audio data and trained it using 400+ existing pieces of recorded musical data.

Melodi 2019

- Melodi is an application that allows the user to record melodies and transform them into sheet music
- Melodi was written in C++ and handles digital signal processing by using several open source libraries.

Linear Algebra Library

2019

- A set of classes and functions written in C++ that allow the user to several linear algebra operations.
- The functions implemented are similar to those implemented in Computer Graphics libraries.

Experience

Ronin Capital

Software Developer

April 2019 - Present

- Maintain and develop software for Ronin's trading platform.
- Work with C++, SQL, and Perl for facilitating data processing of financial information.

Open Source/Freelance

Contributor

2018 - Present

- Identified and fixed several bugs for a 3D graphics engine.
- Developed a CSV parsing app written in Python for a client

Scientific Computing Group

Mentor

January 2018 - May 2018

- Assisted with instructing a group of students in the Natural Science department on the topics of scientific computing in Python with an emphasis on problem solving and data visualization.
- Specific Python libraries include: numpy, matplotlib and scipy.

Academic Center for Excellence

Peer Tutor

2017 - 2018

• Tutored peers with concepts of computer science including data structures, algorithms, and the Object-Oriented Programming paradigm.

Skills

Languages: C++, C, Python, SQL, Bash, Java, JavaScript, Perl

Tools/OS: GNU/Linux, macOS, Windows, Bash/Shell/Terminal, Xcode, Vim, Emacs, Visual Studio, git/Github

General: OOP, FP, Relational Databases, Networking, Scripting