

DEEPAK CHENNAKKADAN

AUDIO PROGRAMMER | AUDIO ENGINEER | SOUND DESIGNER

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TECHNICAL SKILLS

Audio Programming
Game Development
Digital Signal Processing
Mixing and Mastering Audio
Recording and Editing Audio
Acoustics
Calculus
Sound Design
Music Composition

LANGUAGES

C / C++
Objective-C (Familiar)
C# (Familiar)
Lua (Familiar)

COMPILERS

MSVC
GNU GCC / G++
Clang (Familiar)

OS

Windows
Android
iOS / macOS

SOFTWARE SKILLS

Visual Studio
Xcode
Unreal Engine
Unity
Nuendo
Cubase
Pro Tools
Logic Pro
Pure Data

TOOLS & API

Git
Subversion
Wwise
FMOD
Core Audio
Cockos IPlug
DirectSound
Cocoa

WORK EXPERIENCE

Head of Technical Development (Avini Group Inc.) (5/2017 - Present)

- Co-Developed a 6 channel surround sound cloud based audio streaming solution
- Developed multiple game tech demos utilizing the company's core audio technology
- Visited potential clients and presented the tech demos
- Coordinated with tech directors of clients regarding project integration on a regular basis

Teaching Assistant (DigiPen ProjectFUN Workshop) (4/2014 - 8/2014)

- Taught the Sound Design for Games Workshops and helped design the curriculum for the same

GAME PROJECTS

Just Flick (Asymmetric Games) (12/2015 - 4/2016)

2D endless shape matching mobile game. (Unity 5, Team of 3)

- Successfully released the game for Android and iOS devices on the AppStore and Google Play Store
- Implemented the audio manager and wrote all the audio logic for the game
- Composed, recorded and mixed all the music for the game

Magnolia (DigiPen Student Project) (9/2015 - 4/2016)

3D narrative game honoring the memory of a 3 year old girl. (C++ Custom Engine, Team of 13)

- Built the audio engine using the Wwise API and implemented 3D positional audio and reverb zones
- Implemented audio metering, footstep zones, and visual debugging for all types of audio objects in the level
- Recorded and implemented all the dialogue in the game

Tread Lightly (DigiPen Student Project) (6/2014 - 5/2015)

2D poetic experience platformer. (C++ Custom Engine, Team of 11)

- Built the audio engine using the Fmod API and implemented various digital signal processing features
- Implemented microphone input with amplitude and frequency detection to affect physics and graphics
- Implemented system to procedurally generate wind sounds using white noise and filters
- Composed, recorded, and mixed all game music and sound effects and mixed/mastered the soundtrack album

AUDIO PROJECTS

AU Plugin Development (DigiPen Student Project) (9/2016 - 4/2017)

Plugins developed using CoreAudio in C++ and Objective C for use in Logic Pro.

- **Spectral-EQ:** Spectrum Analyzer with 6 band parametric EQ and pre and post processed signal graphs
- **Pedal Stack:** Guitar Processor with Distortion, Equalizer, Reverb, Pitch Shift and Delay pedal types

MIDI-Gram (DigiPen Student Project) (9/2016 - 12/2016)

Algorithmic Composition using N-gram analysis. (C++)

- Implemented ability to parse and playback MIDI files
- Utilized N-gram analysis to algorithmically compose new music based on the input MIDI file

VST Plugin Development (Personal Project) (5/2015 - 7/2015)

Plugins developed using WDL-OL in C++ for VST2, VST3 and Standalone formats.

- **R2D2IZER:** Simple one knob oscillator that generates digital tones sounding similar to R2D2 from Star Wars
- **Eclipse Synth:** Synthesizer instrument with 2 oscillators, 4 waveform types, 3 filters, and an ADSR envelope

EDUCATION

Bachelor of Science in Computer Science and Digital Audio (8/2013 - 4/2017)

DigiPen Institute of Technology, Redmond, Washington, USA

Diploma in Sound Recording and Engineering (8/2012 - 8/2013)

Digital Academy - The Film School, Mumbai, India