

# Michael Pitaniello Audio Programmer

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## Industry Experience

**Audio Programmer | Turn 10 Studios** Feb. 2018 – Aug. 2019  
Forza Motorsport 7 | Custom Engine, FMOD

- Added runtime performance data recording to the audio engine (C++) so that content creators could measure the impacts of design changes.
- Coordinated with Turn 10's tools and automation team to implement performance tests and establish baseline data value for audio.
- Automated audio team workflows using the **FMOD Studio** scripting feature in **JavaScript** to reduce time spent on manual and repetitive tasks.
- Communicated directly with Firelight Technologies to address both bugs and potential new features regarding the **FMOD Studio** middleware.
- Improved automated FMOD Studio build scripts using **Windows Batch Script** and **PowerShell**.

**Audio Programming Intern | Infinity Ward** May – Nov. 2016  
Call of Duty: Infinite Warfare | Custom Engine

- Updated hardware detection code using **WASAPI**, allowing for automatic microphone detection in the game's multiplayer and co-op modes.
- Improved sound tools' performance, runtime error handling, and response to device change using **WASAPI**, **Direct Sound**, and **XAudio2**.
- Created pipeline tools in **C#** to simplify large scale changes to assets, metadata, and signal mixing.

## School Project Experience

**Audio Programmer | DigiPen** Aug. 2015 – May 2016  
BLUESHIFT VR | Custom Engine, Wwise

- Created an audio interface utilizing the **Audiokinetic Wwise API** with our engine's editor to facilitate asset integration, testing, and revision.
- Wrote, tested, and maintained a page-based **memory manager** to improve engine performance in a multithreaded environment.
- Provided a **thread-safe error logging** system to centralize error reporting while providing additional data, such as callstack reports.

## Additional Work Experience

**Programming Intern** May – Aug. 2017  
DigiPen Research and Development

- Worked as part of a team to create new learning materials, assignments, and labs in **ARM Assembler** for introductory CS courses.

## Education

**Bachelor of Science in Engineering and Sound Design**  
DigiPen Institute of Technology Aug. 2018

**BFA in Music Performance, Focus Guitar Performance**  
Marshall University July 2013

## Skills / Tools

### **Languages**

C / C++  
C#  
Windows Batch Script  
PowerShell  
JavaScript (familiar)  
ARM, 32-bit (familiar)

### **APIs**

FMOD (Core + Studio)  
WASAPI  
Wwise  
DirectSound (familiar)  
PortAudio (familiar)

### **Audio**

FMOD Studio Middleware  
Wwise Middleware  
Pro Tools 10  
Logic Pro 9  
Implementation  
Asset Tracking  
Audio Recording/Editing

### **Engine Systems**

Audio Engine  
Memory Management  
Input Management  
Error Logging  
Profiling

### **Platforms**

PC  
Xbox One  
PlayStation 4

### **Development**

Visual Studio  
Unity 3D  
Perforce  
Git

### **Team**

Jira  
Team Foundation Server  
Agile / Scrum