Sean DuBois

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EXPERIENCE

OpenAI - American artificial intelligence (AI) organization.   **2024 - ***
- Wrote WebRTC Server + Azure Infrastructure
- Added WebRTC/SIP/Microcontroller support to Realtime API
- Shipped 1800-ChatGPT
- Migrated ChatGPT Voice from LiveKit to Pion
- Implemented browser take-over (via WebRTC) in ChatGPT Operator

LiveKit - Open Source WebRTC stack for building scalable, real-time audio and video experiences.   **2024 - 2024**
- Designed and Implemented SIP support
- Responsible for customer success/integration challenges
- Performed outbound sales/cold calling

Twitch - Interactive livestreaming service for gaming, entertainment, sports, music, and more.   **2021 - 2024**
- Built 'Stream Together', co-streaming for broadcasters on Pion
- Added WebRTC to **Open Broadcaster Software**

Apple - Technology company that specializes in electronics, software, and online services.   **2020 - 2021**
- Built FaceTime links, service that allows users to join FaceTime from a web browser
- Designed and implemented media Quality of Service subsystems

Amazon - American electronic commerce and cloud computing company   **2018 - 2020**
- Designed and implemented Pure C WebRTC implementation for embedded devices
- Worked on Chromium on Android/Linux/Windows, the foundation for Amazon Silk
- Added support for Mediatek WebRTC H264 encoding on Android

Infiniscene - broadcast studio built on the web   **2016 - 2018**
- Wrote cloud compositing engine, ingestion of many sources and output to many destinations
- Created ingestion engine, handles multiple popular transports RTP/UDT/SRT/RTMP/WebRTC/FTL
- Deep WebRTC usage, worked with ICE/DTLS/Custom signaling in GStreamer
- Created H264 analyzer to educate users, parsing byte-stream to warn about unsupported features

System Associates - Developer of full stack software and hardware for major hotels   **2011 - 2016**
- Wrote Dialplan and Applications in C for Asterisk
- Developed a web interface so non-technical users could manage system

PROJECTS

Pion WebRTC - *Pure Golang implementation of WebRTC.*
Creator, Implemented SRTP, SCTP, STUN and ICE. No 3rd party library usage.

WebRTC for the Curious - *A book on how WebRTC really works.*
Author, learn about the protocols of WebRTC. A book that goes beyond the APIs.

Open Broadcaster Software - *Open cross-platform screencasting and streaming app*
Added WebRTC outputs and sources

amazon-kinesis-video-streams-webrtc-sdk-c - *Embedded WebRTC Implementation*
Designed and worked with team of 5 to implement. Used in IoT/Robotics.

Broadcast Box - *Self hosted streaming with WebRTC*
Creator. Used to develop OBS WHIP Output

GStreamer - *Free pipeline-based multimedia framework.*
Added **AV1** support. Fixed bugs, added flvmux feature