Sean DuBois

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EXPERIENCE

Amazon - American electronic commerce and cloud computing company   **2018 - ***
- Worked on Chromium on Android/Linux/Windows, the foundation for Amazon Silk
- Wrote tooling so developers could use cloud desktops to develop Silk, instead of physical machines
- 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
- 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
- Updated developer tooling, moved developers over to shared Docker workflow

Etsy - e-commerce website focused on handmade   **2014 - 2016**
- Improved *Kibana*, adding aggregations and features for internal use
- Worked on internal IRC client that aimed to humanize users, adding proprietary extensions
- Upgraded Etsy to PHP 7, which involved porting multiple language extensions written in C

onShore Development - Creator of Webcheckout, an scheduling and asset management application   **2013 - 2014**
- Converted Web App to be API driven, using Common Lisp and PostgreSQL on the backend
- Ported to frontend to Angular, replacing projects in Dojo and jQuery
- Replaced legacy markup/styling with Bootstrap

System Associates - Developer of full stack software and hardware for major hotels   **2012 - 2016**
- Used Asterisk with custom Dialplan and Applications written in C to create a hosted PBX
- Created a deployment system using git so updates and new installs can be done seamlessly
- Developed a web interface to manage PBX

SKILLS

Programming and Markup Languages
- C/C++
- Lisp (Scheme and Common Lisp)
- Javascript/HTML/CSS
- Go
- PHP

- Shell Scripts
- LaTeX
- Python
- Rust

PROJECTS

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

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

PHP - *Scripting language especially suited to web development.*
Added **class constant visibility** to the language. Ported msgpack, oauth, yaml and others to PHP 7

Janus - *WebRTC gateway, mostly used for relaying RTP*
Fixed bugs, added small streaming feature

Chromium - *open-source Web browser project started by Google*
Added support for Mediatek WebRTC H264 encoding on Android

fail2web - *fail2ban GUI, written with Go and AngularJS.*
Creator, contributed to **fail2ban** and **ogorek**