

FAN YOU

Software Engineer

(516) · 359 · 8605 ◇ contact@fyou.me

EDUCATION

Carnegie Mellon University, Entertainment Technology Center (ETC)

May 2016

Master of Entertainment Technology

Course: Distributed Systems, Algorithms and Advanced Data Structures, Building Virtual World.

New York Institute of Technology

May 2014

B.S. in Computer Science

Course: Operating Systems, Computer Architecture, Computer Graphics, Computer Networks, Database.

TECHNICAL STRENGTHS

Programming Languages	C++, Java, C, Objective-C, Python, JavaScript, TypeScript
Systems	GNU/Linux, MacOS, Windows
Platforms	Oculus Rift, Gear VR, Eye Gaze, Kinect, leap Motion
Tools	SVN/GIT, Vim

WORKING EXPERIENCES

Max

June 2021 - Current

Engineering Lead, User Session Context

Seattle, WA

- Led a 6-engineer team, developed a Stateless Context platform that delivers User Context for all Max APIs.
- Implemented granular User Context Hydration, Graph-based Context Dependency Management, and Cached Context Invalidation.
- Enabled services to notify clients of User State Changes via Context, eliminated hardcoded client logic.
- Developed Session-based in-app test tool (Multiverse), facilitating testing of unlaunched markets, content premier, and fault injection in production without extra setup.
- Sustained 480K RPS in the U.S. and cut Redis/DB costs by 90% compared to the legacy platform.

HBO Max

June 2019 - June 2021

Staff Software Engineer, Identity & Auth

Seattle, WA

- Built HBO Max identity platform with microservice architecture, led the U.S. launch, migrated 40M HBO Now user and later expanded to LATAM & EMEA with roaming support.
- Developed a sharded API Gateway, centralized cross-cutting concerns and enhanced resilience. Introduced an in-house DSL based on OpenAPI, cut API onboarding time from weeks to minutes.
- Built HBO Max Privacy Processor for CCPA compliance.

Amazon

Nov 2016 - June 2019

Software Development Engineer, Financial Ledger

Seattle, WA

- Worked on Amazon's Financial Ledger and Accounting System, built a multi-tenant configuration storage system and processing engine (Flare).
- Built the in-memory caching/indexing mechanism with interning for Flare, which greatly improved configuration query API speed with minimal memory overhead.
- Lead and built Excel-like UI editing experience for configuration in Flare.
- Design and implement Schema Definition(language feature) for describing schema of transactions in Flare.
- Built the Regression Testing Framework for configuration changes in Flare.
- Design and implement conflict resolution mechanism for concurrent configuration editing in Flare.
- Built a React-Redux based SPA website for journal line adjustment.

The MathWorks*Software Development Engineer Intern*

Jan 2016 - May 2016

Natick, MA

- Worked on building extension for Simulink that enable 3rd party UI to communicate with Simulink by implementing an intermediate mapping layer.
- Implemented the code generation process and made Simulink portable for 3rd party UI as runtime lib.
- Helped migrate Simulink from Matlab/C++ based UI to JavaScript based UI.

OPENSOURCE PROJECTS

GNU Compiler Collection*Libstdc++ Developer*

May 2015 - August 2015

Pittsburgh, PA

- Implemented fundamental TS: Extend shared_ptr to support arrays (N3920)
- Implemented fundamental TS: Polymorphic Allocator (N3525)