

Summary

Through developing software for nuclear reactors, 3d x-ray machines, and OpenTable's SMS messaging system I've learned the value of simplicity and robustness. I believe in leading through earned respect and mutual trust. I enjoy solving problems that don't have solutions.

Experience

Netflix Senior/Staff Software Engineer	2017 - present
<ul style="list-style-type: none">Devised and led implementation of sharding scheme for Netflix API which improved resilience, reduced latency, and saves \$10M/yrEmbedded with resilience engineering to develop innovative server capacity test framework based on PID control theoryLed development of Netflix's Federating GraphQL Gateway. This platform now powers >60 Netflix Studio applications	
OpenTable Senior Software Engineer	2015 - 2016
<ul style="list-style-type: none">Led development of OpenTable's SMS/email messaging serviceScaled messaging service 300x to handle millions of transactional messages per monthReduced worst case message latency from 10 minutes to 10 seconds	
Tennessee Valley Authority I&C Engineer	2009 - 2015
<ul style="list-style-type: none">Supported Nuclear Core Monitoring systems across 6 nuclear unitsIn charge of implementing cyber security controls for various nuclear systemsEmployed Forward Error Correction to allow reliable streaming through a data diodeInitiated and developed new software to calculate Spent Fuel Pool time-to-boil (post Fukushima)	
GE Healthcare Research Intern	2008
<ul style="list-style-type: none">Researched tomosynthesis in digital mammographyDeveloped image correction process for tomosynthesis image acquisitionCreated test for determination of lossy compression threshold for tomographic images	

Education

Master of Science ECE (Electrical and Computer Engineering) <i>Georgia Institute of Technology</i> , Metz, France Specialization in Telecommunications, Networks, and Signal Processing	2008
Master Recherche SIAO (Signals, Images, Acoustics and Optimization) <i>Institut National Polytechnique</i> (INP-ENSEEIH), Toulouse, France Specialization in Signal and Image Processing	2008
Bachelor of Science in Engineering ECE - with Honors <i>Mercer University</i> , Macon, GA Selected by College of Engineering, "Outstanding Electrical Engineering Student."	2006

Skills

Front End / UI: Photographer. Typographic enthusiast. Passionate about user experience. I appreciate the simplicity that React.js affords.

Programming: Kotlin, Java, [Python](#), [Clojure](#), [Haskell](#), [Fortran](#), [Go](#), Typescript ... Whatever is best suited for the task at hand

Hardware: I built my own induction wah pedal.

Talks

- [How Netflix Scales its API with GraphQL Federation](#)
QCon Plus 2020
- [The Network is Reliable and Other Tall Tales](#)
Chadev 2016
- [The UNIX Philosophy](#)
Chadev 2015