

Professional Experience

Software Engineer (Innovation Specialist)

April 2016 – Present

18F, General Services Administration • Austin, Texas (remote employee)

- Engineering lead for Federalist, a static site building and hosting platform for federal government websites. Responsibilities include full-stack system development and maintenance, making and communicating architectural decisions, writing documentation, and providing support to end-users.
- Technical lead of a small team tasked with providing oversight and guidance to a vendor team that is using agile methods to build a new staffing application for the Department of State. Responsibilities are primarily reviewing the code, system architecture, and development practices of the contractor team.
- Helping build organizational culture and capacity by creating and updating documentation, assisting other developers through troubleshooting and code reviews, serving as facilitation lead, and participating in cross-team guilds and working groups.
- Worked with a cross-functional, agile team to develop well-tested new features of CALC, a web application to help federal contracting officers with finding and negotiating contracting rates. In addition to software development, project responsibilities have included assisting with user research interviews, participating in collaborative design workshops, and communicating with stakeholders.

Lead Software Developer

May 2012 – March 2016

Texas Natural Resources Information System, Texas Water Development Board • Austin, Texas

- Lead developer of several geospatial web-based applications, such as the 2017 Interactive State Water Plan, the Geospatial Emergency Management Support System 2 (GEMSS2), and the 2012 Interactive State Water Plan.
- Led the modernization of in-house websites and applications through the use of open source software, version control, issues management, scripted deployments, and cloud-based infrastructure.
- Organizer and repeat speaker of the TNRIS GeoRodeo, an annual conference for geospatial software developers.

Partner and Consultant, Coseppi Partnership

August 2011 – January 2012

CAMBIAR Program • Huaraz, Ancash, Peru

- Provided instrumental on-ground support for the Climate Adaptation in Mountain Basins in the Andean Region (CAMBIAR) program.
- Met with stakeholders, drafted foundational program documents, prepared grant applications and budget estimates, collected field data, created maps, and developed communications and funding plans for the program.

Research Fellow and Graduate Research Assistant

June 2009 – May 2011

Center for Research in Water Resources, The University of Texas at Austin • Austin, Texas

Analyst Consultant (Software Developer)

August 2007 – January 2009

Accenture • Austin, Texas

Education

Master of Science, Environmental and Water Resources Engineering

Fall 2010

The University of Texas at Austin • Austin, Texas

Bachelor of Science, Computer Engineering; Bachelor of Arts, Chinese

Spring 2007

The University of Maryland • College Park, Maryland

Skills and Other Activities

- Full-stack software development with JavaScript and Python, including frameworks like React and Django, and other modern web technologies.
- Familiar with deployment and infrastructure technologies including Docker, Cloud Foundry, Amazon Web Services, and Terraform.
- Co-founder of MaptimeATX, a beginner-friendly meetup to teach participants about maps and cartography.