# Carl Schroedl

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US Department of the Interior OCIO, GS-13 Acting Software Architect, July 2023 - Present

- o Founding software development community of practice for eleven bureaus and eight offices
- Leading the software development community's zero trust architecture transformation
- Promoting agility, user-centered design, DevSecOps, cloud, loosely coupled architectures

US Geological Survey Water Mission Area, GS 7-12 Computer Scientist, 2013 - July 2023

## Software Engineering

- Delivered national-scale water information systems by collaborating with agile product owners, scrum masters, scientists, DBAs, designers, cloud engineers, security, operations, architects, and +35 developers
- Designs and develops monolithic and microservice systems using Java, Spring, Python, JavaScript, Vue.js, TypeScript, Docker, PostgreSQL, and GitLab CI/CD
- Leverages AWS including Lambda, S3, SQS, SNS, RDS, CloudFront, EC2, X-Ray, CDK
- Contributed to +200 git repositories

#### **Acting Scrum Master**

- Acted as a scrum master for 6 months
- Facilitated standups, retrospectives, sprint and release planning meetings
- Introduced backlog refinement ceremony
- Migrated team documents and communications to new software suite
- Improved team's processes and tools for addressing technical debt

# **Engineering Leadership**

- Led workshop to identify needs for the USGS-wide coding community
- Coauthored <u>USGS-wide best practices</u>
- Represented the Water Mission Area on the USGS Software Steering Committee
- Contributed to the DOI Open Source Software Policy
- Advised the DOI: ZTA Strategy, creating an ATO for GitHub Enterprise Cloud
- Chaired and regularly presented at developer knowledge-transfer meetings
- Coauthored <u>modular contract</u> QASP, SOO

### Product Owner of Water Enterprise Standards and Tools

- Established processes, tools, and culture empowering ~50 IT staff to collaboratively evolve technical standards
- Enabled fulfillment of standards through agile product ownership of production services for software composition analysis, SAST, code quality, secure container images, with POCs for DAST, accessibility scanning, and <u>DORA metrics</u>

Education: University of Wisconsin – Madison B.S. in Computer Science, 2008-2012

**Training:** Gartner IOCS, No Fluff Just Stuff (4 times), FOSS4G (2 times), iEMSs, Data for Impact, Geometry of Redistricting, dozens of local meetups on Java, Python, JavaScript, and Big Data

Books Read: Recoding America, Accelerate, Scrum, The Pragmatic Programmer, more

**Activities & Interests:** bicycle touring, better voting through the open source Pivot Libre project