

James Turk

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Experience

Open States

Washington, DC

FOUNDER & PROJECT LEAD

Oct. 2016 - Present

- Founded team to establish Open States as an independent project upon closure of Sunlight Labs. Responsible for coordination of non-profit fiscal sponsorship and other logistics.
- Lead development and architecture for project to collect and standardize legislative information from all 50 state legislatures.
- Coordination of large team of volunteer and contract developers both virtually and at in-person hackathons, including paid mentorship of several Google Summer of Code students.
- Designed & implemented new publicly-accessible GraphQL API for the project.
- Rebuilt several services to use Lambda & ECS to drastically reduce scraping costs and improve API availability.
- In April 2019, awarded Reynolds Journalism Institute grant, funding development of bill tracking features.
- In September 2019, awarded portion of a National Science Foundation C-Accel grant, funding full-time work on project.

Princeton Gerrymandering Project

Princeton, NJ

PRINCIPAL ENGINEER

Jan. 2019 - Oct. 2019

- Served as principal engineer and architect for the Princeton Gerrymandering Project. Building tools with Python, Django, Postgres/PostGIS, ReactJS, and managing EC2 cloud infrastructure for national redistricting database.
- Led collaboration efforts with other major redistricting groups around the country on Open Precincts data standard, tool development, and building a shared pipeline for getting civic data into the hands of citizen redistricters.
- Additional responsibilities included guiding technical hiring and overall technology decisions for the project.

PBS

Arlington, VA

DIRECTOR OF TECHNOLOGY

Sep. 2015 - Jan. 2019

- Served as technical lead to two teams responsible for PBS backend APIs and orchestration layer.
- Led overhaul of internal data model for storage and curation of all PBS video metadata. Used by 300+ PBS stations and national producers.
- Architected new orchestration layer for communication between backend services and Mobile/OTT applications.
- Designed & implemented Elasticsearch powered search service for public media video assets.
- Evaluated upstream data providers for seamless transition between scheduling APIs used by 300+ PBS member stations.

Orlando Sentinel

Orlando, FL

CONTRACT DEVELOPER

Aug. 2015 - Oct. 2017

- Built & maintained custom Florida Legislature tracking site and API for Orlando Sentinel.
- Also built several custom web applications as part of ongoing relationship with Sentinel after main project was complete.

Sunlight Foundation

Washington, DC & Boston, MA

DIRECTOR, SUNLIGHT LABS

Sep. 2014 - Jun. 2015

- Managed 20-person labs team responsible for all development, design, and systems administration.
- Provided guidance to entire organization on technology issues, internal and external.
- Assisted in planning of new projects, crafting proposals, and grant reporting.

OPENSTATES.ORG AND MUNICIPAL DATA TEAM LEAD

May 2010 - Sep. 2014

- Coordinated effort among several organizations to build standards for legislative data.
- Established and ran four-person Boston office for three years.
- Maintained Amazon EC2-based server infrastructure for project.
- Represented organization and project at wide variety of conferences.
- Managed project team consisting of three full-time developers, several interns, and community of 50 open source contributors.

DEVELOPER & OPEN SOURCE COORDINATOR

May 2007 - May 2010

- Projects included: crowdsourcing tools for federal spending and lobbying, Congress API used by major news and governmental organizations, nonprofits and campaigns, and community-organizing platform to mobilize Sunlight Labs volunteer community.
- All major work released as open source, often in form of reusable components;
- Primarily used Python, Django, Javascript, PostgreSQL, MongoDB.

Education

Rochester Institute of Technology

B.S., COMPUTER SCIENCE

- Minor in Public Policy & Minor in Political Science

Rochester, NY

2004 - 2008

Skills

Languages Python · JavaScript · Go · Rust · C · C++ · HTML 5 · CSS

Technologies Django · PostgreSQL · PostGIS · FastAPI · React · Celery · Elasticsearch
Ansible · Docker · Terraform · nginx · uWSGI · uvicorn · Linux · Git · Vim

AWS EC2 · S3 · ECS · Lambda · SQS · SES · DynamoDB

Selected Presentations

Open Civic Data

GOOGLE/CTCL BALLOT DATA CONVENING

Invited participant in annual conversation about civic data standards used by Google, Microsoft, Facebook, etc.

Washington, DC

2017-2019

Django Built A Nonprofit

DJANGO BIRTHDAY

Invited to speak at conference celebrating 10 years of the Django web framework.

Lawrence, KS

Jul. 2015

Opening Government Data

HACKONS LA CORRUPTION

Presented ongoing civic tech work to audience of government and volunteer developers.

Montreal, QC

Nov. 2012

Open Data, Open States

NATIONAL CONFERENCE OF STATE LEGISLATURES SUMMIT

Presented ongoing state legislative work before audience of state legislators, staffers, and lobbyists.

Chicago, IL

Aug. 2012

Opening Government with Python

PYCON US 2011

Presented poster on civic tech projects at largest annual Python conference.

Atlanta, GA

August 2011

Open States Project

NEW YORK TIMES: OPEN

Presented Open States work at first New York Times: Open event to audience of journalists and developers.

New York, NY

Oct. 2010

Selected Open Source Projects

jellyfish

[HTTPS://GITHUB.COM/JAMESTURK/JELLYFISH](https://github.com/jamesturk/jellyfish) · [HTTPS://GITHUB.COM/JAMESTURK/GO-JELLYFISH](https://github.com/jamesturk/go-jellyfish) ·

[HTTPS://GITHUB.COM/JAMESTURK/RUST-JELLYFISH](https://github.com/jamesturk/rust-jellyfish)

Python, C, Rust, and Go implementations of string comparison tools such as Levenshtein distance, Jaro-Winkler, Soundex, and more.

scrapelib

[HTTPS://GITHUB.COM/JAMESTURK/SCRAPELIB/](https://github.com/jamesturk/scrapelib)

Python utility library for scraping unreliable websites with features like forced-caching, retries, and request throttling.

django-markupfield

[HTTPS://GITHUB.COM/JAMESTURK/DJANGO-MARKUPFIELD/](https://github.com/jamesturk/django-markupfield)

Custom field type for Django projects that stores markup (markdown, ReStructuredText, etc.) and pre-rendered HTML side-by-side.

validictory

[HTTPS://GITHUB.COM/JAMESTURK/VALIDICTORY/](https://github.com/jamesturk/validictory)

JSON Schema-based declarative validation for data in Python dictionaries.