

# James Turk

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## Experience

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### Open States

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.
- In September 2019, awarded portion of a National Science Foundation C-Accel grant, funding full-time work on project.
- Lead development and architecture for project to collect and standardize legislative information from 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.

### 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, D.C. & 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

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### Rochester Institute of Technology

B.S., COMPUTER SCIENCE

- Minor in Public Policy & Minor in Political Science

Rochester, NY

2004 - 2008

## Skills

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**Languages** Python · JavaScript · Go · C · C++ · HTML5 · CSS

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

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

## Selected Presentations

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### Django Built A Nonprofit

DJANGO BIRTHDAY

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

Lawrence, KS

Jul. 2015

### Open Civic Data

PBS MEDIASHIFT COLLAB/SPACE

Presentation of Sunlight Foundation's work to audience of national media organizations.

Washington, DC

Nov. 2014

### 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

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### jellyfish

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

Python, C, 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.