Jacob Quinn Sanders.

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SKILLS
Python / PHP / JavaScript / HTML / CSS
web and document scraping / data acquisition, validation and cleaning /
Selenium / QA / documentation / Django / Flask

PROFILE
As a software developer, I use technology to guide, to educate, to illustrate, to explore. With my background in journalism, I'm familiar with so many of the ways users and real-world information can be complex and imperfect -- the ways in which they need help telling their own stories. Accuracy, nuance and deadlines are all familiar. Software and journalism both require a love of learning, which I hold as close as my love of sharing. So I volunteer to teach new coders in training sessions and serve as an adjunct at a university. I started somewhere, too. And It won't be long until the people I teach are teaching me.

EXPERIENCE
Juvare (formerly Intermedix), Pittsburgh, Pa., 2016-present. Software engineer.
The Pittsburgh office of Intermedix was founded as Collaborative Fusion in 2002 and acquired in 2011. A portion of Intermedix became Juvare in May 2018. I work on webservices related to a showcase product: a web-based tool for emergency-management agencies to coordinate disaster responses and vet volunteers.

- Wrote and maintained a suite of dozens of PHP object-oriented scrapers, parsers, API connectors and uploaders that form the backbone of an ETL pipeline to handle millions of raw third-party records across multiple formats, including text files and SOAP objects, for storage and querying in PostgreSQL databases
- Created a Python test harness to simulate AWS Lambda execution for local development
- Contributed to the migration of one of our oldest services to new architecture in AWS and deployment with Ansible and Terraform
- Contributed to UI and UX as well as backend databases, and everything in between, using Agile methodologies and Git for version control
- Resolved several of our most persistent bugs with new functionality to validate user-input fields
- Refactored file validation and handling in PHP to produce new auditable reports while processing batch files and making data transformations to update a PostgreSQL database
- Regularly reviewed and tested other engineers' code changes, also writing and updating unit tests
- Contributed to the implementation of a Java client, REST API, and UI

West Virginia University, Morgantown, WVa., 2018-present. Expert in residence and adjunct instructor.
- Lead an editorial team for the 100 Days in Appalachia project comprised of faculty and students focused on data-driven work surrounding the 2018 midterm elections, through a grant from the Democracy Fund
- Oversee and lead development of tools or applications for collecting, storing and visualizing data
- Developed a course to teach students to write code in the service of journalism

War Streets Media, Pittsburgh, Pa., 2015-present. Co-founder, developer.
War Streets Media is an incorporated startup in development focusing on data journalism and tools as well as information design.
- Built the responsive website Boozicorns in Python/Django and JavaScript, making searchable and mapping in Leaflet the rarest bottles available in Pennsylvania on any given day. Deployed on remote Linux/Ubuntu server running Apache and mod_wsgi with Varnish caching. Supported and maintained it for a year and counting, with regular users including local bartenders and people in search of holiday gifts. Gave interviews about it to interested media as well
- Scraped state-level data on direct-shippers of wine to further clean it and enhance it with third-party geolocation API integration to build Grape Aphid, mapping and sharing the data and data analysis publicly as a responsive Python/Flask web app with a flat-file JSON backend. Hosted on a remote Linux/Ubuntu server running Apache and Gunicorn
- Engineered and refactored a multithreaded web scraper and a PDF parser in Python to crawl, acquire and clean the Pennsylvania Liquor Control Board's retail database daily. Reduced runtime 85 percent from first working version. Programmatic storage and access in PostgreSQL and AWS S3. Automated on Linux server with crontab and Bash script
- With no APIs available, built and automated web scrapers across multiple government sites in Python using lxml and Selenium, targeting, cleaning and storing data related to campaign finance.
- Helped develop data-acquisition, pricing and product strategies

Freelance web developer and information curator, Pittsburgh, Pa., 2015-2016.
- Worked most often as a subcontractor, writing a crawler in Python to collect all of a small church's web-based PDF forms and document their locations, contributing custom JavaScript and CSS to WordPress projects, and researching and documenting competitors' not-always-public efforts within a business space

Pittsburgh Post-Gazette, Pittsburgh, Pa. 2011-2015. Breaking-news editor, audience engagement editor.
- As breaking-news-editor from 2011-2014, recreated the job from the ground up, leading the region's largest news outlet to post more news faster and to update stories more frequently. Coordinated with senior editors across various desks and shifts to update workflows and make our operations more digital-first. Incorporated analytics into decision-making

- Breaking news was the only category in 2014 in which the PG held all three finalist spots in the Golden Quill awards
- Worked closely with social-media editors across platforms, sometimes managing primary accounts.
- Edited at times dozens of stories a day -- words, headlines, multimedia, HTML -- and also served as rewrite on big breaking stories, found leads and sources, helped reporters shape information into daily and enterprise stories as they developed in real-time
- Beginning in 2014, helped manage the launch of a new user-generated content platform and content verticals, working across departments to conceive and integrate functionality and user experience and QA-testing prototypes

Carlow University, Pittsburgh, Pa. 2013-2015. *Adjunct instructor and student newspaper adviser.*
- Helped students learn journalism at a university without a journalism curriculum as they resurrected a campus publication story by story, online and in print

Freelance writer, Pittsburgh, Pa. 2010-2012.
- Wrote news and features for clients including the Pittsburgh Post-Gazette, Arkansas Life, Pittsburgh Magazine, Craft Pittsburgh and Patch.com on topics including ghost bikes, craft beer, Southern barbecue in Yankeeland and the business of a changing Italian neighborhood. Also ran the Wordpress website Eatsburgh, dedicated to food and drink in Pittsburgh

Gas Business Briefing, Pittsburgh, Pa. 2011. *Staff writer.*
- Covered the business, legal and regulatory sides of the natural-gas industry for this B2B online publication focused on North America

Arkansas Democrat-Gazette, Little Rock, Ark. 2007-2010. *Staff writer*
- Go-to reporter for front-page enterprise, breaking news and features. Developed strong sources. Document sleuth
- Worked with new reporters and interns, training them in information-gathering and writing
- Found stories others didn't: A deal between a police chief and a city council member so a personal client wouldn't go to jail despite an arrest warrant. State police using Tasers lacking any policy allowing them. A police officer denied disability benefits for his PTSD credited my stories with his later victory -- the first of its kind in the state. Officers killed in 1887 added to state and national memorials after my research

Portland Tribune, Portland, Ore. 2004-2007. *Staff writer.*
- Won awards for projects, comprehensive coverage and spot news as the criminal justice reporter at a publication chosen the nation's best non-daily newspaper in 2006
- Story highlights: Built records databases and showed that 10 percent of cops accounted for almost 50 percent of all uses of force. Stories on the holes in county-run jail-intake background checks

prompted broad changes in those policies. Reported and wrote a series on ex-drug cops sick from exposure to meth-lab chemicals

The Sun, San Bernardino, Calif. 2003-2004. *Staff writer*.
The Desert Sun, Palm Springs, Calif. 2002-2003. *Staff writer*.
The Philadelphia Inquirer, Philadelphia, Pa. 2000-2002. *Two-year intern*. 2000-2002.
The Sacramento Bee, Sacramento, Calif. *Freelance correspondent*. 1999-2000.
Newsday, Melville, N.Y. *Reporting intern*. Summer 1999.
Reno Gazette-Journal, Reno, Nev. *Design/copy-editing intern*. Winter 1999.
Nevada Appeal, Carson City, Nev. *Reporting, design/copy-editing intern*. Summer 1998.
Tigard Times and Tualatin Times, Tigard, Ore. *Reporting intern*. Summer 1997.

EDUCATION

University of Nevada, Reno. 1996-2000. Reynolds School of Journalism. Top print-sequence student, 2000.

Coding Campus, Provo, Utah. 2015. Junior Python developer.
Now called V School, this was an intensive three-month code academy. My track focused on Python and Django