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# margeaux.spring@civicdataalliance.org

Profile

I'm an A11y-focused, Department of Homeland Security 508 and IAAP CPACC a11y certified software developer who loves automating anything I can with Python. iOS Development, Alexa Skills Dev, Web Application Development, Website Production, CI/CD Pipelines, cloud deployments, CSS Animation, data collection, visualization and management, and Hackathon planning/production are all in my wheelhouse. In addition, I have grassroots community organization and leadership skills via Civic Data Alliance and Code for America. I'm one of the "100 Brilliant Women in Al"for 2023, a GitHub maintainer for CDA and Data for Democracy. In addition, I serve as Thought Diversity lead and maintainer for the Global Data Ethics Project, a Linux Foundation Project.

10+ years of client management experience. I was also 3rd place winner of Startup Weekend Louisville for the artiFACTS App.

IoT Alexa, Electron apps

Languages Python, Ruby, nodejs, JavaScript, Swift, PHP, HTML5, CSS3, web3 (decentralized web)

Frameworks/Tools

Netlify, Vue, Nuxtjs, Solid, Rails, Django, Flask, Jupiter Notebooks, Plotly, Jekyll, 11ty, Vapor,
Perfect, Angular, jQuery, d3.js, Docker, Sass, git, GitHub, GitLab, Vagrant, GitHub Pages, npm,
grunt, gulp, webpack, yarn, WordPress, Xcode, Alexa Hospitality console, Bootstrap, Foundation,

CSS Grid, jest, nightwatch, axe core, pa11y, pa11y-ci

Cloud & Pipelines AWS, Azure, Kubernetes, Terraform, Terragrunt, Gitlab, Github Actions, Heroku, Digital Ocean,

Jenkins, ArgoCD, Prometheus

Databases InfluxDB, MongoDB, mySQL, mySQL Lite, DynamoDB, Postgres, Neo4j, Firebase

Data Visualization Grafana, Python with: Matplotlib, BeautifulSoup, Pandas, Bokeh, Seaborn, Plotly, Holoviews,

Geoplotlib, Javascript: D3.js, Chart.js, Leaflet, C3.js

Organizational Tools Slack, Mattermost, Atlassian Products -Jira, Confluence, Bamboo, Stash, Asana, Basecamp,

Campfire, IFTTT, ConstantContact, GetResponse, ActiveCampaign, MailChimp, Typeform

Professional Development

Currently leading the Platform Operations team at Capella Space as an Engineering Manager & Senior A11y Engineer in the modernization and streamlining of processes, including CI/CD, instilling agile methodology and version control best practices leveraging git and Gitlab, for software development and release while founding the Accessibility Practice area to shift Accessibility left across all teams in the company and working to ensure Accessibility across Capella Spaces portfolio of products.

I led the creation and process establishment of the Accessibility Practice area at CivicActions. My work focused on the needs of the users of the Federal Government Department of Health and Human Services Centers for Medicare and Medicaid, The VA, and the open data DKAN federal sites, in addition to guiding the practice behind building Drupal CMS modules to deliver accessible code.

I led the A11y Team at Atria as a Senior A11y & Software Engineer. This is a team I built from a grassroots foundation. I secured buy-in and budget from high-level C-Suite stakeholders at a company with over 16,000 employees to advance the accessibility program. As the lead for this team, I helped drive the efforts that focused on making Accessibility foundational to everything we built. We leveraged ongoing education, certification, automation, and user testing to achieve our accessibility goals for each product.

I received the company-wide Equity Award from my peers in Product Innovation for 2021.

I brought version control (via git and GitHub) to Atria in my first week on the job. It is now standard practice across the company's software departments and digital products.

I was able to advocate for and write a developer career path tracking implemented in our digital department. This career path is the first of its kind for the company. It is currently being used as a template for cross-department and across companies in the brand families.

**Department of Homeland Security 508 Certified Trusted Tester:** 2021- present

certification #TT-2212-02309
IAAP CPACC: 2022-present
IAAP Member: 2021 - present
OSI Member: 2019- present

OWASP Louisville Chapter founder: 2018- present OWASP Foundation is the source for

developers and technologists to secure the web.

Data for Democracy: 2016-present: Github lead, D4D website, Global Data Science Code of

Ethics, Thought Diversity Lead, Community Organizer and Ambassador

Code Louisville & Code Kentucky Mentor: 2016-2021: Python, Swift, Full Stack JavaScript,

Front End Web Development, Ruby/Rails, PHP

Civic Data Alliance: 2015-present: A11y Lead, Community Advocate, Core Member, Software

Engineer, Open Data Portal Contributor, 311 Louisville Contributor

Girls Who Code: 2021-present: Mentor and facilitator

# **Texas Freedom Colonies Selects Louisville Data Team**

Scholar, writer, and professor at Texas A&M, Dr. Andrea Roberts, has selected the Root Cause Research Center and Civic Data Alliance to support and develop the next stage of the Texas Freedom Colonies Project (<a href="www.thetexasfreedomcoloniesproject.com">www.thetexasfreedomcoloniesproject.com</a>). The project is sponsored by the National Trust for Historic Preservation through The African American Cultural Heritage Action Fund. Link to more info about the fund here: <a href="https://savingplaces.org/african-american-cultural-heritage">https://savingplaces.org/african-american-cultural-heritage</a>

Press

Bloomberg Tech: Why We Need Community-Driven Tech Ethics: Two Years of the Global

**Data Ethics Project** 

**CNet: How a Kentucky city connects to the CNET Smart Apartment** 

**CNET: Bright Lights, Smart City** 

United Nations: Data for Democracy Wins Unite Ideas #IDETECT Data Challenge to Monitor

**Worldwide Patterns of Internal Displacement** 

GovTech: Louisville Leverages Crowdsourcing for Civic Good Cities count on civic hackers to get the data to the people

Projects

#### medicare.gov

Build product, ensuring all accessibility needs are met. Consult with and educate other developers, designers, content creators and government client stakeholders on how to make widely accessible products that are 508 compliant. Automate stand to check compliance.

## cms.gov

Build product, ensuring all accessibility needs are met. Consult with and educate other developers, designers, content creators and government client stakeholders on how to make widely accessible products that are 508 compliant. Automate scans on over 11,000 urls to check compliance

## data.cms.gov

Build product, ensuring all accessibility needs are met. Consult with and educate other developers, designers, content creators and government client stakeholders on how to make widely accessible products that are 508 compliant. Automate scans to check compliance.

# **Texas Freedom Colonies**

Lend technical expertise to develop best practices for cemetery registry; an intuitive mobile field instrument for community site assessment, intake, and referral; a strategic plan to upgrade The Texas Freedom Colonies Atlas; instructional/tutorial media assets; Add updated justice-centered data policies.

#### **Atria Senior Living**

Build, maintain, deploy the main codebase, ensuring a11y custom components and satellite websites for the company and clients. Build custom touch screen apps, Alexa apps, iOS apps

# **Smoketown Louisville**

Build, design, maintain, deploy the main site codebase, for the Smoketown Neighborhood Association

# **Atomic Contracting**

Build, design, maintain, deploy the main site codebase, write copy for Atomic Contracting

# **SmartCity Alexa Skills for the City of Louisville**

Helped build and maintain Alexa skills & Alexa Podcasts or the Metro Louisville

# **American Printing House for the Blind Explorer Project**

Community-driven civic tech project to help make our communities more accessible, inclusive and equitable by adding Points of Interest to OpenStreetMap via the web interface, maps.me, etc.

#### **Feed Louisville**

Community project to address food deserts and food disparity in Louisville, KY Food insecurity, through a myriad of avenues, is a very real problem in Louisville.
6.1% of the population lives in a food desert. 3.9% of children in Louisville have low access to a grocery store (more than one mile).

# **CityVoice**

A Rails based place-based call-in system for gathering and sharing community feedback by dialing or texting 311. Leveraged by the city for the Dixie Highway Project

## **Civic Data Alliance**

Build, maintain, deploy the main codebase, build and collaborate on projects with other community organizations, organize and host hackathons and monthly meetups. Focused on advocating for inclusion, diversity, equity, accessibility, openness, transparency and accountability in government, civic tech and open data. Interested in ethically liberating, improving, gathering, defining, and reporting on public data and the state of civic tech, while fostering an inclusive and diverse civic tech community.

# GrubScore https://github.com/cheapwebmonkey/grubscore

I used data from the Open Data portal for Metro Louisville to create an app in Ruby and Rails showcasing the restaurant inspection/violation/score data from the portal. The app geolocates any new restaurants that are entered. Also includes CSS animation. The next iteration of this app will include reverse geolocation that comes from the user's device, data and mapping visualizations, using the Google Visualization API.

# Open Hours: https://github.com/cheapwebmonkey/openhours

Open source Ruby and Rails app deployed via Heroku that allows the local hackerspaces, to list when someone is in the space, so that non-members can come work on their projects.

# Improv Comedy Clubs: Miami, FT Lauderdale, West Palm Beach, Louisville

Built and maintained iOS apps and responsive eCommerce sites for this client, including an iOS app to collect signatures. I also did all of their hosting, DNS, digital marketing, from creatives, coding and distribution.

## Experience

Senior A11y Engineer & PlatOps Engineering Manager - Capella Space Aug 2022-Present Team Lead and A11y Engineer cross-company. I enjoy being able to create and build automations with Python, CI/CD pipelines, data visualizations and a11y checks with axe-core, while helping transition this aerospace company to an Accessibility first mindset and establishing an Agile environment. I am currently writing software automations to check for a11y issues on public facing projects and to automatically open tickets for them in Jira, while building an A11y-First culture across the company.

**Force Multiplier and Change Agent**. I lead the charge to automate the boring things, visualize the things we can, and to make accessibility and WCAG 2.2 guidelines the foundation to all we create. I am championing the visualization, automation and version control of accessibility efforts company-wide.

# Staff A11y Engineer - CivicActions Mar 2022-Aug 2022

Senior A11y Engineer cross-team. I enjoy being able to create and build a11y automations with Python, CI/CD pipelines, and a11y checks with axe-core, while helping transition the company to

an Accessibility first mindset in an Agile environment. I am currently writing 508 documentation for the Federal Government's devs & content providers to guide them in producing accessible content in their Drupal CMS. Change agent. I lead the change to automate the boring things, visualize the things we can, and to make accessibility and WCAG 2.1 guidelines the foundation to all we create. I am championing the visualization, automation and version control of accessibility efforts company-wide.

Product Innovation Lead: Software & Accessibility - Atria Senior Living May 2020-Mar 2022 Senior Software Developer on the Product Innovation team where I lead 3 teams of developers, including our cross-discipline A11y Team. I enjoy being able to create and build automations with Python, CI/CD pipelines, IoT apps, Alexa skills, iOS apps and various flavors of web dev for different projects and stakeholders, while helping transition the company to an Accessibility first mindset in an Agile environment. Change agent. I lead the change to automate the boring things and to make accessibility and WCAG 2.1 guidelines the foundation to all we create. I founded the A11y at Atria Product Team and am championing the accessibility efforts company-wide.

# Emerging Technology Team - Atria Senior Living May 2016 - May 2020

Developer on the Emerging Tech team where I create and build IoT apps, Alexa skills, iOS apps and various flavors of web dev for different projects and stakeholders, while helping transition the company to an Agile environment. I spearheaded the change to actual version controlled software leveraging git and Github for the entire engineering department. I lead the charge in order to get Agile introduced as a basis for our SDLC.

# Data for Democracy and Civic Data Alliance Jan 2015 to Present

Research & Development, Software Engineering, Community Leadership and Building, marketing, liaising with Government/Elected & Appointed Officials for ethical and open data solutions.

# elementAlly, LLC and Freelance Jan 2009-Present

Accessibility focused dev and design.

Accessibility/508 audits for school systems serving up 10,000 students,

Accessibility/508 audits and remediation help for gov and civic systems and application.

Directly handled app and web site building and design.

Defined architectural and accessible technical parameters and directed site maintenance and improvement.

Ensured code compatibility with browsers and devices while maintaining up-to-date knowledge of technologies.