

**SO YOU WANT  
TO BE AN  
ACCESSIBILITY  
ENGINEER**

**Rachele DiTullio**

**Wesley Estes**

# WESLEY ESTES, ASSOCIATE ACCESSIBILITY ENGINEER AT TPGI

- **B.S. in Electrical & Computer Engineering**
- **Worked in a wide range of industries and positions, including Retail, Data Centers, Sales, Oil & Gas, Real Estate, and Construction**
- **Been a Project Manager, Technical Product Manger, Account Manager and ran my own company for a few years**
- **Got inspired to enter Accessibility by Rachele**
- **Happy to use both technical background and personal skills to elicit positive change**



# ASSOCIATED ACCESSIBILITY ENGINEER SKILLS

- Deep understanding of latest WCAG guidelines, ARIA usage and W3C APG design patterns
- Community involvement to stay current and ensure accurate understanding and application of standards
- Ability to read and understand code, especially semantic HTML but also CSS and Javascript, for manual markup analysis
- Familiarity with various techniques, methods, and edge cases
- Strong time management and communication skills
- Toolbox of resources to use and reference while performing audit work

# ASSOCIATE ACCESSIBILITY ENGINEER RESPONSIBILITIES

- Advise clients on how to make their digital offerings conform with the standards of accessibility and maximize the usability for users with disabilities using internationally recognized standards, guidelines, and techniques
- Perform accessibility evaluations of web pages, desktop applications, mobile apps, and other emerging platforms
- Intelligently apply accessibility testing tools, use assistive technology and perform expert manual analysis of client products using the TPGi ARC platform
- Clearly document accessibility findings and recommendations for clients, building upon the extensive base content found in the ARC Knowledge Base
- Participate in accessibility training to clients, virtually and on-site as warranted
- Answer accessibility related questions from clients to ensure insights are actionable

# WHAT DOES MY DAY LOOK LIKE?

- Check in with various teams
- Perform audit work primarily, other tasks include report generation, engagement scoping & configuration, QA work, VPAT creation, validation testing, client office hours, responding to help desk tickets and taking part in trainings
- Research potential failures or ask colleagues for advice
- Keep teammates and clients up to date, log hours appropriately

# HOW TO SKILL UP AND GET HIRED

- **Networking (online or in-person)**
  - Meetups
  - Conferences
- **Continuous learning:**
  - Online courses
  - Webinars, articles and blog posts
- **Certifications & Practice**

# SECTION 508 TRUSTED TESTER CERTIFICATION FROM DHS



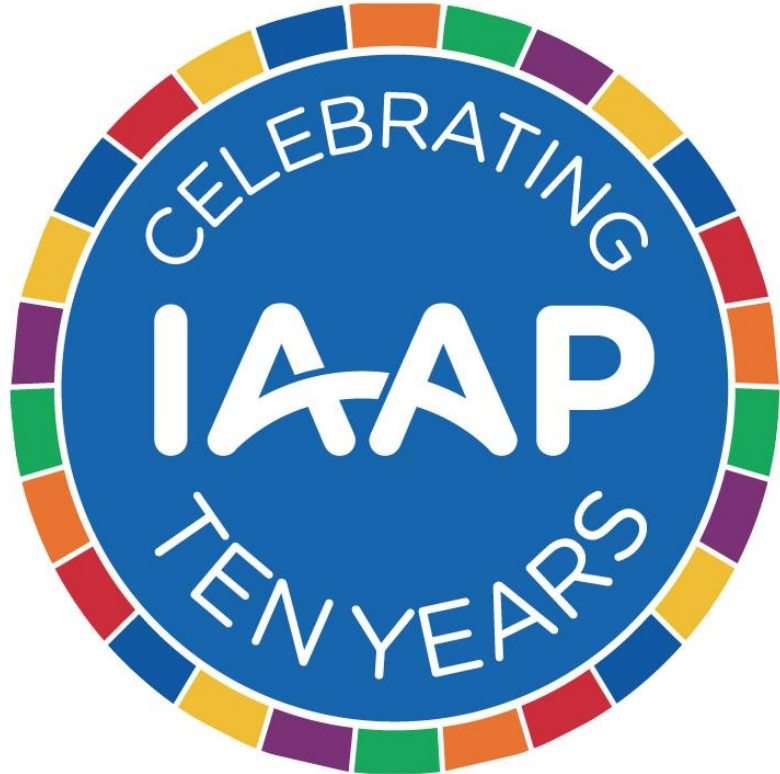
- The DHS (Department of Homeland Security) Trusted Tester Process is a manual test approach that aligns with the ICT Testing Baseline, and provides repeatable and reliable conformance test results.
- DHS offers training and formal accessibility testing certification for using the DHS Trusted Tester Process. Agencies that adopt the Trusted Tester Process only accept test results from individuals who have been certified as Trusted Testers.

# TRUSTED TESTER EXAM

- Training and test are both free
- Training consists of 6 Sections and 85+hrs of content
- Two 100 question multiple choice exams (practice & actual)
- 90% or higher required to pass final exam
- Certification does not expire, but new version releases require re-certification



# INTERNATIONAL ASSOCIATION OF ACCESSIBILITY PROFESSIONALS



- Professional education live and archives sector and topic-specific webinars
- Career Center
- Professional certifications discount (\$100/exam)
- Continuing accessibility education credits (CAECs) offerings

# IAAP CPACC CERTIFICATION



The IAAP Certified Professional in Accessibility Core Competencies (CPACC) credential is IAAP's foundational professional certification.

Relevant domains for the CPACC credential include the web and other digital technologies, architecture and the built environment, consumer and industrial design, transportation systems, and any domain in which thoughtful design, policy, and management can improve disability access.

The CPACC Certification is valid for three years and can be renewed by earning 45 CAECs.

# CPACC EXAM

- **Cost is \$485 (\$385 for IAAP members)**
- **Two-hour, pass/fail exam with 100 multiple choice questions (four options) in the following content areas:**
  - **Disabilities, Challenges, and Assistive Technologies – 40%**
  - **Accessibility and Universal Design – 40%**
  - **Standards, Laws, and Management Strategies – 20%**

# RACHELE DITULLIO, SENIOR ACCESSIBILITY ENGINEER AT CITIZENS

- Background as a frontend web developer mostly using HTML and CSS
- Went to graduate school for Information Studies with a specialization in User Experience Design, support work in disability studies
- Work for 20 years for enterprise software companies before switching to accessibility engineering



# SENIOR ACCESSIBILITY ENGINEER SKILLS

- **2+ years experience with assistive technology like screen readers**
- **Experienced with Web Standards, HTML5, CSS and JavaScript**
- **Detailed knowledge of WCAG 2.1, WAI-ARIA and ATAG 2.0**
- **Ability to present to various stakeholders**
- **Strong prioritization skills and ability to quickly re-prioritize in a dynamic environment, manage multiple projects**
- **Complementary skills such as QA, UX, design, user research**

# SENIOR ACCESSIBILITY ENGINEER RESPONSIBILITIES

- **Accessibility test any new or updated code for design system components and work with developers to find a solution**
- **Perform accessibility audits of new or existing digital properties like web applications and native mobile applications**
- **Review 3<sup>rd</sup> party vendor solutions that are included in any Citizens' digital properties, e.g. Financial Insights**
- **Create and give accessibility training to Citizens developers**

# Citizens Design System

Getting Started >

Accessibility >

Brand Guidelines >

Components ▾

Mobile UI Library >

Salesforce Library >

Web Responsive Library ▾

Accordion

Banner

Breadcrumbs

# Citizens Design System

The Citizens Design System is here to help you build clean and accessible interfaces for Citizens digital experiences.

**Explore Our Digital Foundations**

# Good morning!

## Checking accounts

\$469,226.29

### Citizens Private Client Checking >

\*2085

[View Statements in Document Center](#)

**\$430,461<sup>.28</sup>**

Available balance

### Test Checking Nickname >

\*1917

[View Statements in Document Center](#)

**\$38,765<sup>.01</sup>**

Available balance

## Line of credit accounts

\$7,500.00

### ODP - Private Checking with Interest >

\*2085

**\$2,500<sup>.00</sup>**

Available balance

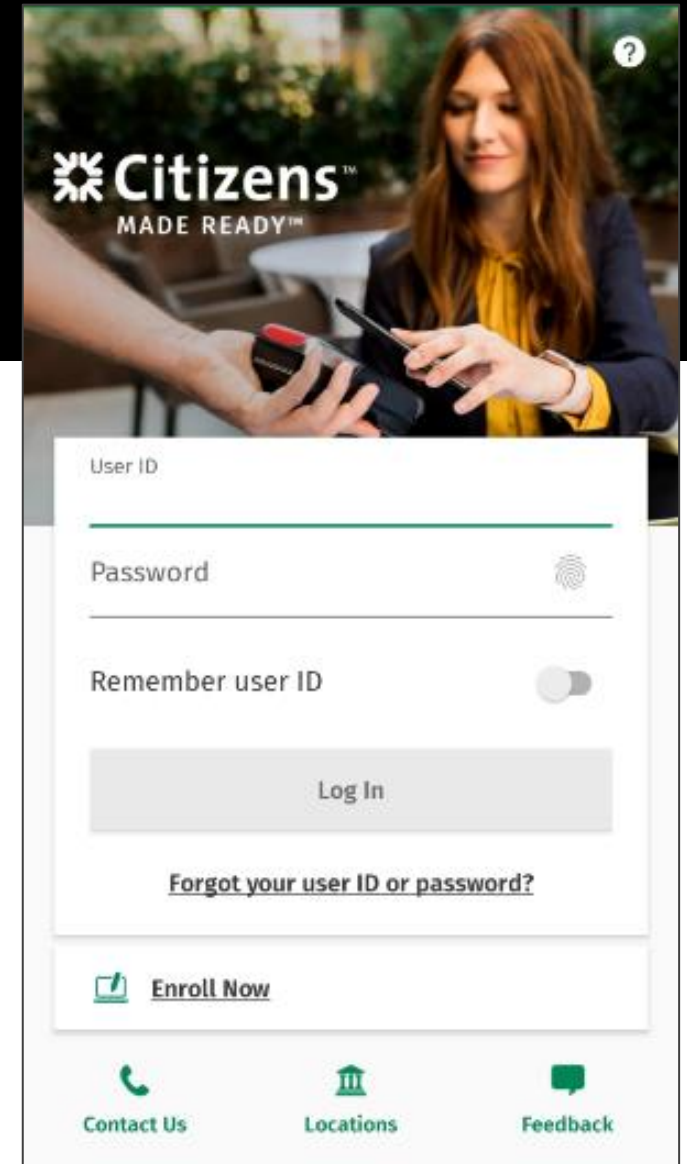


# CORE MOBILE APP

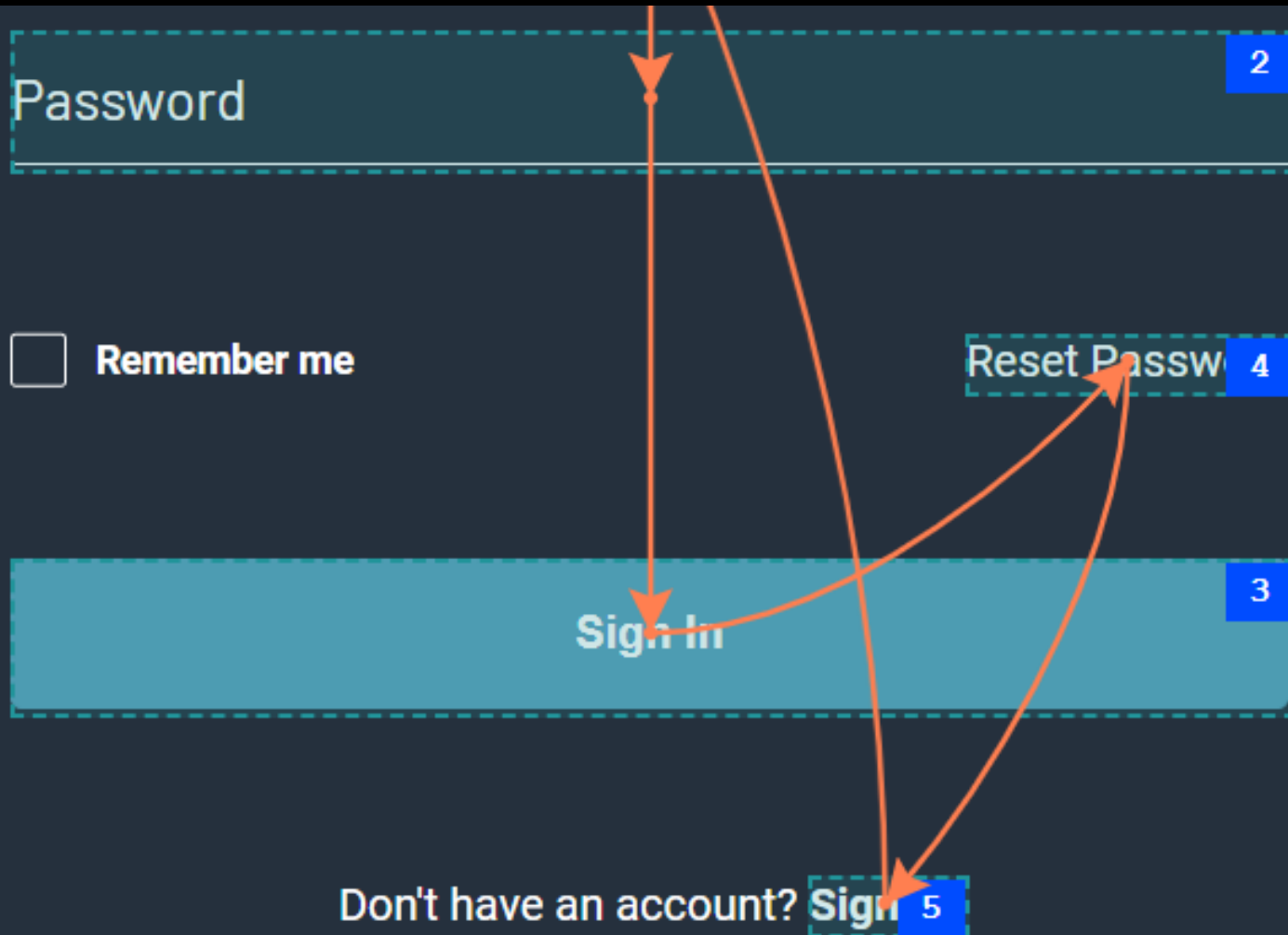
Android: 123 WCAG violations

iOS: 120 WCAG violations

- Controls that can't be accessed with a keyboard
- Controls without accessible names
- Application times out without option to extend the time limit



# 3<sup>RD</sup> PARTY AUDITS



# TRAINING

- **Building Accessible Web Applications**
- **Manual Accessibility Testing**
- **Web Content Accessibility Guidelines (WCAG 2.2)**
- **Structuring Accessible Forms**
- **Semantic HTML**
- ***Coming soon:* Building Accessible Mobile Applications**

# IAAP WAS CERTIFICATION



The Web Accessibility Specialist (WAS) is an IAAP technical Professional Certification that quantifies and represents a Candidate's expression of their "current" hands-on technical digital accessibility proficiency.

It's not for beginners or individuals looking to get into web accessibility.

The WAS Certification is valid for three years and can be renewed by earning 35 CAECs.

# WAS EXAM

**Two-hour, pass/fail exam with 75 multiple choice questions (four options) in the following content areas:**

- **Create accessible web content – 40%**
- **Identify accessibility issues – 40%**
- **Remediate accessibility issues – 20%**

# IAAP CPWA CERTIFICATION



The designation of Certified Professional in Web Accessibility (CPWA) is earned by individuals who successfully pass both the Certified Professional in Accessibility Core Competencies (CPACC) exam and the Web Accessibility Specialist (WAS) exam.

The CPWA Certification is valid for three years and can be renewed by earning 55 CAECs.

# CONTINUING ACCESSIBILITY EDUCATION CREDITS (CAEC)

- Attending classes, workshops, webinars, and other educational events about accessibility.
- Presenting educational materials about accessibility outside your job function.
- Publishing articles, books, blogs, or other publications about accessibility.
- Participating in formal Mentoring programs in accessibility.
- Speaking engagements at IAAP or other approved educational events.
- Volunteer service with IAAP.

# CAEC CALCULATIONS

CAECs are counted in 15-minute increments rounded up to the nearest number. Credits will be based on published times. For example:

- 30 minutes = 0.5 CAECs
- 40 minutes = 0.75 CAECs
- One hour = 1 CAEC
- 75 minutes = 1.25 CAECs
- 90 minutes = 1.5 CAECs



# ACCESSIBILITY JOB SEARCH

Digital accessibility job board: <https://www.a11yjobs.com/>

- **Accessibility engineer**
- **Accessibility consultant**
- **Accessibility SME**
- **Accessibility tester**

# COMMUNITY HELP

Web A11y Slack: <https://web-a11y.slack.com/>

Appt Foundation (mobile): <https://appt.li/slack>

# Q&A

