Making the Digital World Accessible to All

For over 10 years, Deque Systems has been devoted to making the digital world accessible to everyone. Deque develops software used by organizations to ensure that their websites, mobile apps and digital content is usable by people with disabilities.
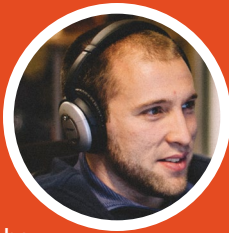
Why Accessibility?

People with disabilities such as blindness, limited mobility, or color blindness use "assistive technology" to use web sites and mobile apps. If a site is accessible, they can navigate and operate very complex web apps.

People

Chris M.

Chris joined Deque after we heard about his role in developing an active scanning keyboard to help people with motor disabilities use mobile devices. Since joining Deque he has been the lead architect for mobile applications and the key contributor to the WorldSpace Xcode plugin.

Carissa D.

Carissa is our user advocate. She knows our users so well, she can tell you their kids' favorite color. Since joining Deque in 2013, Carissa has overhauled the WorldSpace user interface and designed a new user experience that will revolutionize the way accessibility testing will be done.

Harris S.

Harris is a front end developer who is passionate about accessibility and sees himself developing his career in the field. Harris joined us directly after graduating from Michigan State University, and quickly became a key part of the team. He helps customers resolve their website accessibility issues and develop best practice patterns for accessible dynamic web applications.

Environment

Creativity is one of our core values, so we built an environment that helps spawn creative work. Our Ann Arbor office is a stimulating, playful place with a diverse team of motivated and skilled individuals.

Our office space is stylish and open—Dequers can work in open spaces or find a quiet area for collaboration.

We're located in an amazing community. Ann Arbor, MI, is widely recognized as one of the best places to live in the U.S. The town is on the 2014 Forbes.com list of the most educated cities and is #3 on the 2014 Mylife.com "10 Best Midsize Cities to Raise Children" list. And South Main Street is one of Huffington Post/Fodor's "America's Best Main Streets." Ann Arbor has some of the best restaurants, art, and entertainment in the midwest—including internationally recognized festivals.

deque 1ST's

At Deque, we're big on making a splash. The code you will work on at Deque is guaranteed to make an impact in our products and to people with disabilities throughout the world. We have received worldwide recognition for our work, including the 21st Century Award in the category of innovation for the product Amaze.

Since 1999, Deque has maintained a reputation for developing innovative technologies. We were the first to release a product that is...
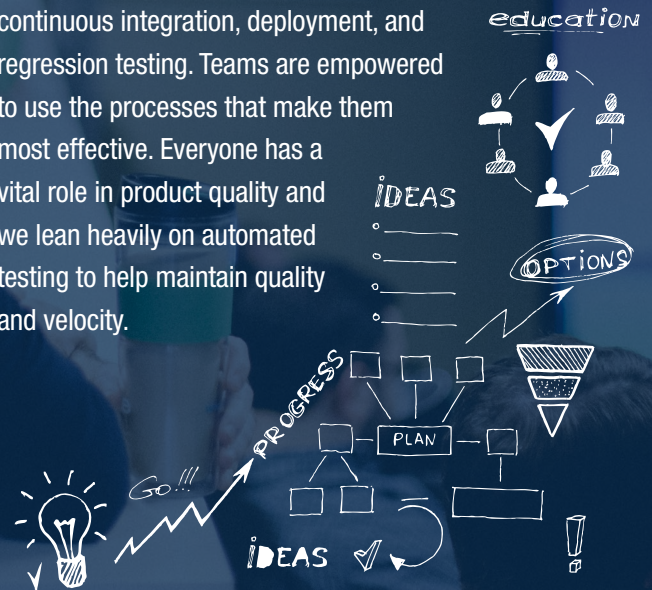
Technologies

We like working with all kinds of technologies — and we don't wait until everyone else is doing it. Here's a sample of the technologies we use every day.

Groovy
GRAILS
2010

mercurial
git
2010

amazon web services™
2010

iOS
2011

mongoDB
2011

node JS®
2012

Android
2012

GRUNT
2012, 2014

Gulp

Jasmine
mocha
QUnit js unit testing
2012

redis
2014

Express
2013

Processes

We have a low tolerance for meetings and ceremony and a high value for getting things done and living up to your word. These principles are embodied in our processes.

Our teams use an agile development process where product management, UX, development and QA all work collaboratively. We use modern tools like git and online collaborative tools for pull requests, continuous integration, deployment, and regression testing. Teams are empowered to use the processes that make them most effective. Everyone has a vital role in product quality and we lean heavily on automated testing to help maintain quality and velocity.

education
IDEAS
OPTIONS
PROGRESS
Go!!!
PLAN
IDEAS

- an accessibility checker integrated with a browser development tool
- a software product for fixing accessibility issues without touching source code
- a web accessibility tool with scripting capabilities for dynamic web applications
- an accessibility tool that accurately calculates color contrast in the browser
- an accessibility testing tool to check the DOM of a dynamic HTML application in high-volume testing

- an implementation of an accessible chat widget using ARIA live
- an implementation of automated accessibility testing on native iOS applications without custom code
- an implementation of accessibility checking integrated into JavaScript unit testing frameworks without a separate server
- an implementation of a screen reader simulation integrated into a development tool

How will you make your ✓ at Deque—and on the world?

Our Products

WorldSpace

Enterprise-Level Web Accessibility Testing

WorldSpace monitors and manages accessibility issues against test standards or custom guidelines. The application combines cutting-edge technology with Deque's accessibility expertise.

Performance:

- Tracks changes to the DOM and analyzes page elements that appear during user interaction.
- Robustly handles multiple projects across geographically dispersed teams, analyzing sites with thousands of pages.

Technologies:

- node.js infrastructure for continuous integration accessibility testing.
- Browser plugins that walk the DOM to analyze accessibility.
- javascript-based rules to analyze DOM for accessibility issues.
- Scalable three-tiered architecture that supports issue tracking, reporting, and analysis.

WorldSpace Xcode Plugin

The WorldSpace Xcode Plugin lets iOS app developers and testers easily detect and fix accessibility problems during development.

Performance:

- Early issue detection. Integrates with standard development tools to catch accessibility problems early.
- Context-sensitive accessibility. Provides helpful information to help you with all levels of accessibility knowledge.
- Integration. Integrates accessibility testing into existing automated testing procedures.

Technologies:

- Uses a customized version of the Open Source LLVM compiler to perform static code analysis to detect accessibility issues.
- Integrates with the Xcode IDE environment to provide a consistent environment for reporting and repairing accessibility problems as apps are developed.

Amaze SDK

The Amaze SDK helps you fix accessibility defects faster, produce higher quality solutions, and spend less time learning about accessibility.

Performance:

Amaze SDK can be used to quickly build or remediate common UI patterns such as:

- Navigation and menus
- Modal dialogs
- Date pickers
- Tabs, panels, and drawers

Technologies:

- Uses the best available open-source technologies and is almost entirely written in JavaScript.
- Since 2012, has used Node.JS and Express.JS to provide the platform for developer tools and our production servers.
- Deployed to both Rackspace and Amazon Web Services, Amaze delivers accessibility fixes to millions of users every day.