

Projects List

# Summer Internship 2015

## Introduction

CMED is an innovative full service Clinical Research Organisation and a development company of advanced eClinical & smart data capture technologies. This summer, we're inviting a select number of students for an exciting Internship Program designed to share insights into the evolving world of clinical research technologies and to potentially help shape the students' professional path.

The challenges we face are related to:

- Moving clinical research to the cloud
- Developing and testing full-featured HTML5 apps connected via REST and WebSockets in support of clinical data capture, quality assurance, analysis and reporting.
- Designing and implementing distributed rich web applications using Coffeescript, HTML5, AngularJS, Backbone, Underscore and JQuery with Promises
- Creating responsive and inspiring web interfaces with Bootstrap, Less CSS, and D3
- Using REST, grabbing and posting data from/to cloud servers running PostgreSQL on Linux
- Designing testing strategies for optimal feature coverage in complex web apps and mobile / Apple iPad apps
- Writing automated test scripts in Gherkin language (BDD) for multi-browser & mobile testing with Selenium on SauceLabs
- Designing manual test cases that cover the software requirements
- Reviewing and updating existing test scripts
- Raising and reporting software defects

We are proud of our work and our people and would love to share our success stories with any interested student.

If you are a motivated student, interested in getting real software engineering and testing experience, join our Summer Internship, we are eager to meet you! We've handpicked several projects that will give you an opportunity to learn and play with cutting-edge in-browser apps supported by the latest cloud technologies.

## Projects list

<b>Development</b>	<p>ReviewApp - identify unreviewed code changes using the Bitbucket REST API:</p> <ul style="list-style-type: none"> <li>• List changes that have not been reviewed since some commit.</li> <li>• List changes that have been inconsistently reviewed (e.g. reviewer same as author).</li> <li>• Graph all Bitbucket review activity (change author, change timestamp, review author, review timestamp) with compelling visualizations.</li> </ul>
	<p>TraceabilityApp - visualize test execution coverage of requirements:</p> <ul style="list-style-type: none"> <li>• Show that every JIRA story assigned to the release scope has at least one associated job on Saucelabs.</li> <li>• Show that every JIRA story assigned to the release scope has passed all tests on all browser/os configurations.</li> </ul>
	<p>SauceCharts - graphically highlight inconsistencies in a batch of Saucelabs jobs:</p> <ul style="list-style-type: none"> <li>• Not all test scenarios have run on all browser/OS configuration</li> <li>• Not all jobs have completed consistently on all browser/OS configuration (e.g. failed on firefox, passed on chrome)</li> </ul>
<b>Testing</b>	<p>Automated tests for Project workflows.</p> <ul style="list-style-type: none"> <li>• Dedicated tests for checking the communication between two or more Project Components.</li> </ul>
	<p>Automated BDD tests for consistency across Project Components.</p> <ul style="list-style-type: none"> <li>• Create a suite that will run on a weekly basis in order to check for 3rd party (Saucelabs/ Google) updates.</li> <li>• These tests will stress the components that are not managed by us as a sort of early warning system.</li> <li>• We'll be able to sooner adjust our existing tests.</li> </ul>
	<p>Create the Star(t)-Fixture</p> <ul style="list-style-type: none"> <li>• An automated Test Suite that will create fixtures for current Project Components.</li> <li>• Have a fixture for each released Project Component.</li> </ul>

## How to apply:

To apply, send us an email at [summerpractice@cmedtechnology.com](mailto:summerpractice@cmedtechnology.com). Please specify in your email the following information:

- Your name
- The specialization where you study
- The group that you have chosen from our offer above (development or testing)
- A short motivation letter with reasons why you choose our company
- Your CV (as details if possible - including projects, content, prizes, etc.)

## Selection process:

- Selection based on CV and Motivation letter
- Technical interview
- Participant's announcement by phone. For a success story, all the necessary details about the internship will be provided.



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