

## Undergraduate Internship Program – Spring 2016

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This report is a summary of my work under the CMU Undergraduate Internships Program at Carnegie Mellon University – Silicon Valley (CMU SV) hosted by Professor Hakan Erdogmus in the Electrical and Computer Engineering group from February to May 2016. Additionally, I provide insights about my life at Silicon Valley.

The goal of my internship was to develop a research vision on Continuous Integration started by Rui Abreu (my host at Faculty of Engineering, University of Porto), Hakan Erdogmus (my host at CMU SV) and Alexandre Perez named CodeAware<sup>1</sup>. Upon my arrival the scope of the project was discussed and then the development of a CodeAware prototype started. This new research vision consists on moving Continuous Integration from a centralized approach to a distributed one giving developers the choice to choose what they want to focus on.

For the prototype I developed an IntelliJ Idea plugin that allows developers to specify their focus and a Jenkins plugin that makes the developers specified behavior work in the Continuous Integration server. During my stay at CMU I finished the development and now we intend to publish a paper describing the vision and how we made it work with the prototype I developed.

My life at Silicon Valley was amazing, I met amazing people and I am sure I made friends for life. Today, I know I was lucky to not afford a place to myself. I lived in a house with eight constantly changing people. I could learn another cultures with them and be part of the Silicon Valley entrepreneurial environment.

This was one of the best experiences of my life and I would recommend it to everyone. I already miss it.

1 – Rui Abreu, Hakan Erdogmus, and Alexandre Perez. "CodeAware: Sensor-Based Fine-Grained Monitoring and Management of Software Artifacts." In *Software Engineering (ICSE), 2015 IEEE/ACM 37th IEEE International Conference on*, vol. 2, pp. 551-554. IEEE, 2015.