

# Henrique de Almeida Machado da Silveira

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## EXPERIENCE

**University of São Paulo**, São Carlos-SP, Brazil

August 2017–December 2017

**Research Project:** “[Variations of Deep Learning for Cancer Diagnosis Using Gene Expression Data](#)”

- Conducted research on different Machine Learning techniques, focusing on three Deep Learning architectures used to classify public domain gene expression data: Multilayer Perceptrons, Convolutional Neural Networks and Stacked Denoising Autoencoders
- Built an automated pipeline in Python (using Keras and Theano) to run multiple Deep Learning experiments consisting of three phases: data balancing, data dimensionality reduction and classification. The pipeline was responsible for running experiments with different configurations, using unique combinations of techniques in each experiment
- Compared and analyzed the results obtained from the experiments after using gene expression data for cancer classification
- Presented the results of the research project to a board of examiners at University of São Paulo, obtaining maximum score

**Arquivei**, São Carlos-SP, Brazil

March 2017–July 2017

**Front-end Development Intern**

- Used React, Javascript and Redux to implement various screens from Arquivei’s platform and improved the style of different screens using CSS, Bootstrap and HTML
- Studied and investigated React’s design principles, component-based architecture and component lifecycle
- Aided the Customer Service team as an apprentice on-call engineer, helping to address client issues related to the platform

**Microsoft Corporation**, Redmond, WA, USA

January 2017–March 2017

**Software Engineering Intern**

- Developed and validated an end-to-end global dismiss feature for notifications, aiming to automatically dismiss notifications on an user’s device if the same notification had been seen by the user on a different device
- Implemented the feature using C#, understanding the functionality of a large scale distributed system
- Created a test iOS app using Swift to demonstrate and validate the scenarios related to global dismiss, recording a video of the app which demonstrated the feature to than 400 people in a Microsoft employee conference
- Global dismiss adds value to Substrate Notification Service’s system, impacting potentially millions of users

**Google Inc.**, Belo Horizonte-MG, Brazil

December 2015–February 2016

**Software Engineering Intern**

- Implemented a back end system for filtering notifications from mobile systems, developing the filtering logic and defining the data models to support this new feature
- Updated the front end in mobile systems to support the developed notification filtering system, adapting both the UI and the data models in the front end
- Developed a document presenting the objectives of the project and proposing strategies for its implementation
- Worked on miscellaneous bugs involving mobile systems

**University of São Paulo**, São Carlos-SP, Brazil

February 2015–June 2015

**Teaching Assistant, Introduction to Computer Science**

- Held weekly sessions with students, highlighting and presenting important topics and addressing questions
- Provided individual assistance with class projects during office hours and graded homework, programming projects and tests
- Created compilations of exercises with solutions emphasising key concepts that lay the foundations of programming skills

**WebMD, LLC**, New York, NY, USA

June 2014–August 2014

**Technology Operations Intern**

- Developed nxlog configuration files involving regular expressions to process logs from multiple applications
- Created Chef cookbooks to automate the installation of nxlog in both Red Hat Enterprise Linux and Windows servers
- Investigated compatibility between RHEL and Windows cookbooks, presenting conclusions to the team

## EDUCATION

**University of São Paulo**, São Carlos-SP, Brazil

February 2012–December 2017

Bachelor of Science, Computer Engineering, **GPA 9.3/10.0**

**Columbia University**, New York, NY, USA

January 2014–December 2014

Computer Engineering, Non-degree international student, **GPA 4.0**

Brazil Scientific Mobility Program, fully-funded scholarship recipient by CAPES

## RELEVANT COURSEWORK

Operating Systems

Algorithms and Data Structures

Databases

Advanced Programming

Parallel Programming

Artificial Intelligence

## SKILLS

**Programming:** C, Python, Java, C#, Swift, Objective-C, C++, Javascript, React

**Languages:** Native Portuguese, Advanced English, Conversational Spanish