Daniel **Galarraga**

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Education

Cornell University   *Ithaca, NY*

B.S. IN COMPUTER SCIENCE   *Aug. 2017 - Dec. 2020 (Expected)*

- Relevant Coursework: Object Oriented Programming & Data Structures, Discrete Structures, Systems Programming, Intro. to Analysis of Algorithms, Functional Programming, Numerical Analysis, Machine Learning (Fall 2019), Computer Architecture (Fall 2019)

Experience

Engineering Practicum Intern   *Google (Sunnyvale)*

GMAIL INTELLIGENCE TEAM   *May 2019 - Aug. 2019*

- Devised a dialog for Hangouts Chat that displays the detailed availability of users who are out of office. The dialog required the use of HTML, CSS and JavaScript.
- Created a cache for Hangouts Chat to reduce the number of requests made to a server. The cache was implemented in JavaScript and involved the use of data structures such as maps and lists.
- Implemented a metrics pipeline for Gmail and Hangouts Chat that tracks the number of times a specific banner has been seen, as well as the number of users who have seen the banner. The pipeline was devised using FlumeJava (Google's MapReduce pipeline framework).
- Integrated user send status into Gmail's Scheduled Send feature. This work involved the use of CSS, JavaScript and Java.

Undergraduate Researcher   *Cornell University*

INDEPENDENT RESEARCH PROJECTS   *Jan. 2019 - Present*

- Explore and prove bounds for algorithms at the intersection of theoretical machine learning and algorithmic game theory; advised by Professor Éva Tardos.

Research Intern   *University of Miami*

TEXT MINING PROJECT   *May 2018 - Aug. 2018*

- Utilized Python to devise an algorithm that determines the main topics present in any given song. This portion of the project involved the use of NumPy, Pandas, NLTK & Gensim.
- Proposed and determined whether artists follow specific patterns when devising songs.

Teaching Assistant   *Cornell University*

COMPUTER SCIENCE DEPARTMENT   *Aug. 2018 - Present*

- Worked for two undergraduate courses: Discrete Structures (Fall 2018) & Intro. to Analysis of Algorithms (Spring 2019, Fall 2019).
- Grade homework assignments/exams and hold weekly office hours.

Skills

Programming Languages: Python (confident), Java (confident), OCaml (confident), C (familiar), HTML/CSS/JavaScript (familiar)

Technologies: FlumeJava, NumPy, Pandas, NLTK, Gensim, BootStrap, Eclipse, Git, Vim

Human Languages: English (fluent), Spanish (fluent), Portuguese (fluent)

Personal Projects

Analysis on FIFA Rankings   *Miami, FL*

LEAD DEVELOPER   *July 2018*

- Implemented an interactive web framework using Dash and Python that allows users to visualize the rankings of a country's men's soccer team throughout history.
- Developed an interactive bar graph using Pandas & Plotly that shows the top ten ranked teams in confederations chosen by the user.

Tip App   *Miami, FL*

LEAD DEVELOPER   *June 2018*

- Utilized Android Studio and Java to create a mobile application that computes the tip (taking into consideration the quality of service) for any given bill amount.