

# JONAS DE CASTRO

9253 Regents Road, San Diego, CA

| (858) 245-3532 |

jonasgdecastro@gmail.com

*Bridging technical expertise with proven experience in management and problem solving*

## UNIVERSITY OF CALIFORNIA, SAN DIEGO

*Bachelor of Science in Chemical Engineering, Minor in Mathematics*

Graduated July 2016

### ▪ GPA: 3.5/4.0

- |                             |                              |                              |
|-----------------------------|------------------------------|------------------------------|
| ✓ Combinatorial Game Theory | ✓ Eng Computation in Matlab  | ✓ Process Modeling           |
| ✓ Accelerated Intro to Java | ✓ Microeconomics             | ✓ Process Dynamics & Control |
| ✓ Mathematical Reasoning    | ✓ Chem Reactions Engineering | ✓ Statistical Methods        |

### Independent Projects

- Designed interactive visualization of data in the Talking Data competition from Kaggle in <http://jonasca.github.io/viz/>
- Developed predictive model on user demographics for Chinese mobile device user which scored a 2.284 in log loss error metric by using logistic regression stratified k-fold cross-validation – [www.github.com/jonasca/TalkingData](http://www.github.com/jonasca/TalkingData)
- Built e-mail spam classifier with support vector machines achieving test accuracy of 95.3% using data from Stanford's Machine Learning course – [www.github.com/jonasca/Spam-Classifier](http://www.github.com/jonasca/Spam-Classifier)

*Awards: Provost Honors, Miguel Velez Scholarship*

## WORK EXPERIENCE & RESEARCH

### Summer Financial Analyst

Jun 2015 – Aug 2015

*BTG Pactual S.A., Rio de Janeiro, Brazil*

- Prepared financial statements and analyzed proposals to improve economics in Net Working Capital and EBITDA for FY15.
- Observed that some co-workers were having trouble with specific tasks in the information flow chain. Took it upon myself to map the entire data flow process and, as a result, removed roadblocks that would sometimes take more than 2 hours to solve.

### Summer Quality Control – New Product Development Team

Jun 2014 – Jul 2014

*Farmoquímica S.A., Rio de Janeiro, Brazil*

- Performed daily tests to pinpoint causes for product mal-adaption in our factories. Discovered errors in the supply chain that resulted in low-yield production. Proposed solutions saved us two days of fruitless testing that would have cost over \$1,000.
- Inspected products in development for compliance with US Pharmacopoeia standards. Utilized HPLC, Gas Chromatography, Atomic Absorption Spectrometer. Worked on a blueprint for future interns that outlined potential red flags and impediments.

### Undergraduate Student Researcher

Jan 2014 – Jun 2014

*James Nieh Lab, La Jolla, CA*

- Researched and analyzed the microsporidian parasite *Nosema Ceranae*. Evaluated the parasite's effects on the growth and behaviors of honeybee larvae when introduced at different doses. Recorded results through a Microsoft Excel spreadsheet.
- Managed and sterilized the homes of multiple families of African bees. Gave informational tour guides to laboratory visitors.

## EXTRACURRICULAR PROJECTS

*BRASA – Brazilian Student Association, International Board of Directors*

Apr 2014 – Jun 2016

### Chief Technology Officer

*Past: Chief People & Management Officer, CMO, Co-President UCSD Chapter, General Director 1st National Conference*

- Managed team of 6 developers to develop website v3.0, [www.gobrasa.org](http://www.gobrasa.org). Directed and launched v2.0 of database (<https://www.gobrasa.org/database/login>) in ¼ the time past CTO needed, including increased automation of platform.
- Led a movement where we infused our core values of “forging a better generation of Brazilian leaders,” “obsessing over excellence,” and “leaders who develop leaders” in over 50 college campuses and 1,000 students across US and Europe.
- Engineered strategies to integrate MBA and Grad students in the U.S. & undergraduates in France and UK into our mission.
- Arranged to have 1st BRASA National Conference for 100+ Brazilian students, in UCSD. Managed our budget of \$7,135.

## TECHNICAL SKILLS & MISC

- **Machine Learning:** Linear & Logistic Regression, Gradient Descent, Feature Engineering, ETL
- **Statistics:** Regression Models, Time Series, Hypothesis Testing, Confidence Intervals
- **Software & Programming Languages:** Python, SQL, Html, CSS, Javascript, Git, R, Matlab, Simulink, Spark
- **Languages:** English (Native), Portuguese (Native), French (Intermediate), Spanish (Intermediate)
- **Citizenship:** Brazilian and Portuguese (European Union), permitted to work in U.S.