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

Independent Projects

- Designed interactive visualization of data in the Talking Data competition from Kaggle in http://jonasca.github.io
- 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
- 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

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. 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.