

DANIEL VICTOR OCHOA

1596 Hague Ave St. Paul, MN | 786-239-2447 | dochoa@macalester.edu | <https://github.com/dochoa1>

EDUCATION

Macalester College

Bachelor of Arts – May 2018

- **Majors:** Applied Mathematics & Computer Science
- **GPA:** 3.80/4.0
- **Honors:** Orange Scholar, Catharine Lealtad Scholar, Dean's List
- **Relevant Coursework:** Data Computing Fundamentals, Object Oriented Programming and Data Structures, Algorithm Design and Analysis, Computer Systems Organization, Theory of Computation, Software Design and Development, Internet Computing, Programming Languages, Introduction to Artificial Intelligence, Statistical Computing and Machine Learning, Linear Algebra, Discrete Mathematics, Probability, Computational Linear Algebra, Projects in Data Science

RELEVANT EXPERIENCE

Macalester College Mathematics Department

Saint Paul, MN

Preceptor

January 2017 – Present

- Preceptor for Multivariable Calculus 2, Discrete Mathematics, Algorithm Design and Analysis, and Theory of Computation.
- Hold biweekly office hours to help students understand in class material and complete homework
- Grade homework weekly, both independently and with the course professors

Infinite Campus, Data Science Team

Blaine, MN

Software Engineering Intern

July 2017 – August 2017

- Worked on the Product Intelligence Team to set up data monitors that ran daily, surveying thousands of ElasticSearch indices, and reported on any suspicious behavior
- Prevented the loss of millions of documents through monitor reports
- Created several canonical SQL databases to be used by other employees as reference for available data

University of Miami Computer Science Department

Miami, FL

Research Assistant

May 2016 – August 2016

- Applied Machine Learning to 24-hour EMG data to find patterns of coactive muscle activation in subjects with spinal cord injuries
- Developed a reliable method of detecting transitions between sleep and wake cycles across subjects using Principle Component Analysis, rectification, and median filtering

SKILLS

- Proficient in Python, R, Java, JavaScript, JQuery, HTML5, CSS3, MatLab, Mathematica
- Familiar with Swift, SQL, C, ElasticSearch, Apache Airflow, Flask, and Django

PROJECTS

- **Instacart Predictive Modeling:** A prediction pipeline done in R to predict an Instacart user's next order using gradient boosted trees.
- **Expedition Ceres:** A native iOS 2D game done in Swift 3 using SpriteKit
- **Droop:** A collaborative art creation web application written in AngularJS and Django.
- **FindMajorPath:** A project in Java that determines the shortest path to achieving a double major at Macalester College, done using a variant of the A* algorithm

ACTIVITIES:

Macalester College Lectures Coordination Board, *Committee member*

Macalester College Mathematics, Statistics, and Computer Science Department, *Student Representative*

Macalester College Orientation 2017, *Orientation Leader*

Macalester College Humor Magazine (The Hegemonocle), *Writer and Managing Editor*

WMCN 91.7, *Radio Show Host*

Macathon 2016/2017, MAA-NCS Team Competition 2016: *Finalist/Top 8 Finisher*

CarlHacks 2016, DataFest 2016, Konhauser Problemfest 2016: *Participant*