

# Tony De La Nuez

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## Education

### Washington University in St. Louis

August 2015 - May 2018

Master of Science in Computer Science, Graduate Certificate in Data Mining + Machine Learning Candidate

Bachelor of Science in Computer Science

Bachelor of Science in Computer Engineering

**Advanced Coursework:** Data Structures and Algorithms, Microcontrollers, Web Application Development, Computer Architecture, Systems Software, iOS Development, OOP Development Lab (C++), Video Game Development

### St. Mary's College of California

September 2012 - May 2015

Bachelor of Arts in Liberal Arts, Physics Focus (3 + 2 Engineering Program)

- 2014, 2015 USA Rugby Division 1 National Champions

**Advanced Coursework:** Modern Physics, Computational Physics (MATLAB), Mathematical Modeling (Python)

## Technical Skills

<b>Skilled:</b>	Java	Arduino	HTML	CSS	AWS	Swift	UNIX/LINUX	PHP	MySQL	Git
<b>Working Knowledge:</b>		C++	JavaScript	MongoDB		AngularJS	Node.js	Python		Socket.IO
<b>Basic Knowledge:</b>		React	Express.js	C		Ruby on Rails				

## Experience

### Washington University in St. Louis – St. Louis, MO

*Head Teaching Assistant (Data Structures and Algorithms)*

November 2016 - Present

- Manage 300 student repositories, 50+ TAs, hold office hours, provide additional lectures, answer student questions

*Creator, Instructor (Data Structures and Algorithms Seminar / WUCode)*

November 2016 - Present

- Created and currently instruct 1-credit course to test 50+ students on data structures and algorithms implementations in a fast-paced development environment, utilizing pair programming and on-the-spot code review

### E&J Gallo Winery – Modesto, CA

Summers 2012 – 2016

*Electrical Engineering Intern, G3 Corporate Engineering*

Summer 2016

- Designed HMI and PLC for factory equipment and wrote SOP for step-by-step testing protocol

*Control Systems Engineering Intern*

Summer 2015

- Designed PLC system to automate wine tank ON/OFF valves and flow pressure during product cycles and cleaning

*Production Engineering Intern, G3 Mobile Bottling*

Summer 2014

- Assisted bag-in-box wine trial; reduced dissolved oxygen introduced to the product by 20% of industry standard

*Mechanical Engineering Intern, Gallo Glass*

Summer 2013

- Led research, scope of work writing, contracting for \$300k project to reuse water and create zero discharge facility

*Engineering Intern*

Summer 2012

## Projects

### Socket.IO Chat Web App - (Node.js, Socket.IO Web Application)

March 2017

- Built a chatroom application with multiple room functionality, user private messages, admin privileges

### Pet App Watch Extension - (Apple Watch App)

March 2017

- Extended pet application to WatchOS, allowing user to feed/play with virtual pet via simple watch interface

### MovieMate - (iOS Application)

February – March 2017

- Built app integrated with OMDB API which allows users to search movies, cache favorites, and find site to stream movie

### News Website - (PHP & MySQL Web Application)

February – March 2017

- Developed a news site in PHP and MySQL with a focus on usability and web security

### This Warlock of Mine - (GML PC Game)

January 2017 – March 2017

- Built platformer computer game in GML with enemy AI, custom physics, event scripting, and UI/UX consideration

### Arduino Fitbit Clone - (C & Java Application)

November 2016

- Created fitness tracker with PC communication protocol, step, sleep, and temperature tracking, user interface

### Class Advisor Web App - (MEAN Stack Web Application)

October 2016 – January 2017

- Created a web app to connect WUSTL students for class registration mentoring/advice