# Alvaro Ortiz-Vazquez

## **EDUCATION**

### **COLUMBIA UNIVERSITY**

New York, NY, Graduated Feb 2016 Bachelors in Arts, Mathematical and Computational Sciences; Concentration in Astronomy GPA 3.5

Four year scholarship with participation in extracurricular enrichment including notable speakers, and cultural excursions.

### COLUMBIA UNIVERSITY SCHOLARS PROGRAM SUMMER ENHANCEMENT FELLOWSHIP GRANT (2015);

**DEAN'S LIST** GPA 3.6+ (SPRING 2015, SPRING 2014, FALL 2013)

### **EXPERIENCE**

#### DATA SCIENTIST / RESEARCH ASSOCIATE

EdLab, Teachers College, Columbia University, 525 W 120th St, New York, NY 10027

February 2017 -

Tasked with developing and implementing computational statistical methods, research tools, and data visualizations using various programming languages for real time motion tracking system in 10,000 Sq. Ft. event space. Authored and presented paper accepted to International Educational Data Mining Conference. Submitted additional papers to related conferences. Performed web analytics by data mining log data and developed user behavior models. Used sketch up 3D modeling to design component for installation of motion tracking system. Led professional development and informational presentations on data mining topics and ethical privacy issues.

#### **LEGAL ASSISTANT**

Cooper and Dunham LLP, 30 Rockefeller Plaza, New York, NY

March 2016 - September 2016

Organized and tracked an extensive set of patent cases and patent applications. Filed Patent Cooperation Treaty applications and reported the granting of foreign patents to enterprises. Managed deadlines and communicated with clients through letters.

### RESEARCH IN DEPARTMENT OF ASTRONOMY AND ASTROPHYSICS

Columbia University, New York, NY
Performed data analysis on large scale galaxy surveys, and mathematical analysis of galactic weak lensing maps. Published article in Jan 2016: Constraining Multiplicative Bias in CFHTLenS Weak Lensing Shear Data.

### MOSTEC CONTENT FACILITATOR

MIT OEOP, Cambridge, Massachusetts

Led and mentored two groups of 15 high school students through a 6 month STEM enrichment program, including a week long conference, and created content on topics to help through career choices and college admissions.

### **AUDIO VISUAL TECHNICAL SUPPORT**

Columbia Scholastic Press Association, New York NY

Provided A/V technical support for over 100 presenters at the Columbia Scholastic Press Association Student Conference. Facilitated technical access to classroom projectors, sound and computer equipment.

#### TEACHING ASSISTANT

Columbia University, New York, NY

Sep 2015 - Dec 2015

Worked grading papers for an introductory astronomy course of 60 undergrad students.

#### **INTERLIBRARY LOANS ASSISTANT**

Columbia University, New York, NY

May 2014 - Jun 2014

Performed library work including analyzing library databases in Excel, processed customer requests for journal articles and books.

# **BI-LINGUAL CUSTOMER SERVICE REPRESENTATIVE**

Bankers Corporation, Eden Prairie, Minnesota

Jun 2013 - Aug 2013

Verified auto insurance with certified agents over telephone. Developed client communication skills.

## VOLUNTEER / EXTRACURRICULAR

### LOVE IN OUR NEIGHBORHOOD STEM FAIR

Tayshana Chicken Murphy Foundation, New York, NY

Sep 2016 -

Organized 6 month long enrichment for a group of 4 high school students culminating in a STEM project which seeks to create a positive social, environmental, or health impact in the community. Served as consultant for enrichment programming and connecting with Columbia University groups, Further organized a neighborhood wide science fair in March 2017 at Columbia University,

# **LEADERSHIP**

### **LUCHA - CLUB PRESIDENT**

Columbia University, New York, NY

Sep 2013 - Dec 2015

Immigration rights group - Designed and built art installation pieces for an awareness campaign. Planned and ran conferences and events. Connecting students with grassroots and non-profit organizations around New York City.

### **UNITED STUDENTS AGAINST SWEATSHOPS - LEAD ACTIVIST**

Columbia University, New York, NY

Sep 2012 - Dec 2015

Organized and led meetings, discussions and educational events around labor rights. Held successful campaigns on campus and delivered speeches in broader statewide campaigns at public rallies. Spoke on panel at national conference.

## **SKILLS**

# **PROGRAMMING / COMPUTERS**

Proficient in Web-Design: HTML, CSS and Javascript, have performed personal consulting and currently involved in projects / Proficient in Python, R, and Java and Experienced in C, C++ in work and classroom settings / Experienced in Databases using SQL, and Excel. Experienced in Web Analytics: Google Analytics, User Modeling, Data Mining, Familiar with machine learning methods, adaptive and recommendation systems.

#### LANGUAGES

Native Spanish speaking conversation, reading, and writing. Performing Spanish to English and English to Spanish simultaneous interpretation at community events and community outreach. Providing translations for independent publications.

Digital music production, painting, attended 2006 and 2012 World Cups, good sense of direction often sought out by friends for help getting around in various cities. Completed Camino de Santiago - Camino Portuguese in September 2016.