

Silvio Ortiz Aburto

166 Bluebird Ct.

Hercules, CA 94547

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OBJECTIVE

To continue growing and learning in the biotechnology industry. I would like be part of a dedicated and passionate team. I enjoy optimizing processes, assay development, data science, statistical analysis and creating tools that make an impact in the day to day operations.

EDUCATION

University of California, Davis – Davis, CA

Sept 2014-June 2016

- *Bachelor of Science in Biochemistry and Molecular Biology*

Contra Costa College – San Pablo, CA

August 2011-June 2014

- Dean's list 4 semesters.

WORK EXPERIENCE

Amyris Inc.- Emeryville, CA.

Associate Scientist II, High Throughput Screening

Sept 2016-Present

Responsibilities:

- Process up to hundreds of micro-plates per week to provide data to strain engineers. Some of these processes are:
 - Inoculate culture at different growth stages and in many different conditions.
 - Liquid-liquid extractions for a large range of compounds.
 - Proficient use of different liquid handler technology.
 - Running the following assays as part of the daily workflow: Biomass OD, UV-OD, coupled enzymatic assays and other UV based assays.
- Qualify and test new plate models for new projects.
 - Finding conditions that best allow scientist to rank strain performance.
 - Quantifying the week to week variation of a specific plate model.
 - Running statistical analysis and present summaries to project group meetings.
 - Extraction development.
- Maintenance of within group web apps.
 - Created a web app that improved day to day operations workflow resulting in; a significant reduction in processing errors, increase in error capturing and improved communication within the team.

Accomplishments:

- Author of multiple web applications using R Shiny and Python Flask:
 - Process Control Chart Application.
 - Real Time Process Tracker.
 - Automated labels generator; resulted in a better ability to track samples and eliminated the need of operators to manually write on samples.
 - Quality Control viewers for several of our pipeline processes.

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- Real Time Tracker of our instruments.
- Developed a High Throughput enzymatic assay to measure residual monosaccharide in samples.
- Optimized liquid extractions that were causing downstream instrument issues.
- Accurately measured the relationship between the height of our labware and the liquid of volume it contains. These measurements are currently used in all extractions.

Molecular Lab Technician, Seed Health.

06/16-09/16

Monsanto Company.

- Running a series of seed washes and centrifugation steps to isolate bacteria from the seed samples.
- DNA extractions.
- Preparation of PCR Master Mix.
- Analyzing the extracted DNA through qPCR to confirm the identity of bacterial Plant pathogens.
- Lab materials organization and preparation.

OTHER EXPERIENCE

Baldwin Lab, Molecular and Cell Biology – UC Davis

Undergraduate Researcher.

January 2015-May 2016

Amyris Inc.

Research Intern, High Throughput Screening

May 2014-August 2014

RELEVANT COURSES

Introduction to Python Programming

January 2018- April 2018

UC Berkeley Extension

Practical Machine Learning with R

January 2018- April 18

UC Berkeley Extension

Data Science Principles and Practice

August 2017-December 2017

UC Berkeley Extension

EXTRACURRICULAR ACTIVITIES

Undergraduate Research Conference, UC Davis. (April 2016)

Poster presentation on the screen of conditions I did to find optimal crystallization of the enzyme CTP Synthetase.

ACCESS-R, UC Davis.(Summer 2014)

Participated in a 2 week internship at UC Davis aimed to help transfer students in the science field to have an easier transition. We worked on group skills, leadership skills and basic laboratory techniques.

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Center for Science Excellence, Contra Costa College.(Fall 2013-Spring 2014)

Science program in which we did volunteer work, weekly tutoring in science and weekly seminars.

USDA Scholars, Contra Costa College.(Fall 2013-Spring 2014)

Took introductory courses in Biotechnology and had weekly meetings to work on projects to practice biotechnology techniques.

Community Service.

Coast Cleaning community service in the Contra Costa county coast.

SKILLS

Programming Languages: R, Python,

Frameworks and Languages: HTML, CSS, Python Flask, R Shiny, R markdown.

Databases: MSSQL, PostgreSQL.

Technologies: Git control system, command line, linux ubuntu, Microsoft office, spotfire analytical software, JMP analytical software.

Languages: Spanish and English.

REFERENCES

Available upon request.