

EDUCATION

University of California, San Diego | La Jolla, CA

M.S. Data Science and Engineering

Jun 2018

B.S. Biomedical Engineering: Biotechnology

Jun 2016

EMPLOYMENT



Seismic Software | San Diego, California

Nov 2017 – present

Data Scientist II

- Development of shared asset identification (visual version history of content, page similarity, page change detection) event design, infrastructure, algorithms, docker containers, and APIs in production using Python.
- Development of page-level recommendations in LiveDocs (automated presentation builder) using Python.
- Own customer-facing insights, design schemas based on business objects, data quality, and develop Power BI dashboards.



Daymon Interactions | San Diego, California

Nov 2016 – Nov 2017

Data Scientist

- Forecasting revenue, predicting employee retention, and data exploration using Python.
- Development of Tableau dashboards, visualizations, and reports of client-specific KPIs.

RESEARCH



University of California, San Diego Qualcomm Institute | La Jolla, California

Jan 2017 – Oct 2017

Data Science Researcher

- Web scraped 1 million health fundraising campaigns from GoFundMe.com using Scrapy.
- Queried and visualized data to quantify funding incentives and ethical concerns using Tableau, Seaborn, and Matplotlib, text mining and text classification using multinomial Naive Bayes and NLTK, and predicting probability of funding success.



University of Washington eScience Institute | Seattle, Washington

Jun 2017 – Aug 2017

Data Science for Social Good Fellow | github.com/uwescience/TrafficCruising-DSSG2017

- Identified cruising (vehicles looking for parking and for-hire vehicles) using Seattle's traffic sensor data, develop a pipeline to store, process, and query the data, and determine the temporal and spatial differences in a Seattle cruising heatmap.



ProQinase GmbH | Freiburg, Germany

May 2016 – Sep 2016

Bioinformatician Researcher

- Data mining of public domain cell line databases using R (PharmacoGx) and development of a Cancer Cell Line Explorer in Tableau for assessing the RNA expression, mutation, and drug perturbation data of 49,273 genes and 3,768 cells.
- Establishing an interactive Tableau dashboard for customer evaluation of biochemical high-throughput data.



Engineering World Health | La Jolla, CA

Jun 2015 – Jun 2016

Synthetic Biology Researcher

- Aligned 180 sequences from 9 strains of HIV1 and identified 5 highly conserved regions of HIV1 for target identification using Biopython and designed synthetic genetic circuits for sensing HIV RNA.



Sanford Consortium for Regenerative Medicine | La Jolla, CA

Oct 2013 – Mar 2016

Stem Cell Researcher

- Utilized Python for data cleanup and machine learning to properly filter, classify, and cluster data (K-means, hierarchical)
- Analyzed 4000+ genes from microarray data, mined 15 transcription factors (TF) and their associated gene pathways profiling differentiation between cell lines, and chose 1 TF for in vitro studies



University of Applied Sciences | Bonn, Germany

Sep 2014 – Dec 2014

Stem Cell Researcher

- Derived primary mesenchymal stem cells from liposuction and bone chips and validated effectiveness of osteogenic, adipogenic, and endothelial cell differentiation through in vitro assays

PUBLICATIONS

Kanaga Arul Nambi Rajanab, Marwa Khater, Francesca Soncin, Donald Pizzo, Matteo Moretto-Zita, Jonathan Pham, **Orysa Stus**, Pooja Iyer, Veronique Tache, Louise C. Laurent, Mana M. Parast. "Sirtuin1 is required for proper trophoblast differentiation and placental development in mice." *Elsevier Placenta*. February 2018.

CONFERENCES

Alokta Chakrabarti, Daniel Feger, Frank Totzke, Sarah Ueber, **Orysa Stus**, Marianne Birkle, Oliver Siedentopf, Marcel Pathe, Thomas Weber, Michael H.G. Kubbutat and Jan E. Ehlert. "Abstract B159: Exploring the functions of TAM kinases: assay development and characterization of potential therapeutics." *AACR-NCI-EORTC International Conference: Molecular Targets and Cancer Therapeutics*. January 2018.

Alokta Chakrabarti, Daniel Feger, Sarah Ueber, **Orysa Stus**, Marianne Birkle, Oliver Siedentopf and Jan E. Ehlert. "Abstract 1208: Analysis of the combinatorial antiproliferative effect of pan RAF inhibitor AZ-628 and MEK1-inhibitor AZD-6244 on a large panel of tumor cell lines." *AACR Annual Meeting 2017*. July 2017.

Orysa Stus. "Low-Cost Paper-Based Genetic Circuits for Detecting HIV." *SALK IPSEN Conference: Synthetic Biology*. January 2016.

Orysa Stus, Matteo Moretto-Zita, Mana M. Parast. "Signaling through Stat1 during human cytotrophoblast differentiation down the invasive pathway." *Society for Reproductive Investigation 62nd Annual Scientific Meeting*. March 2015.

HACKATHONS

Basic Needs github.com/OrysaStus/basicneeds AngelHack Seattle, WA Best Use of HERE Technologies	Jul 2017
Breaking News newsbreakers.herokuapp.com Global Artificial Intelligence Hackathon Seattle, WA 1st Place	Jun 2017
Data Bots Unleashed wastebotsunleashed.github.io San Diego Women's Hackathon San Diego, CA 1st Place	Apr 2017
San Diego Hearts sandiegohearts.github.io Big Data Hackathon San Diego, CA 2nd Place	Feb 2017

FELLOWSHIPS | AWARDS | SCHOLARSHIPS

Data Science for Social Good Graduate Fellow Data Science Microsoft University of Washington	Apr 2017
RISE Professional Fellow Bioinformatics DAAD (German Academic Exchange Service)	Mar 2016
Muir Provost's Research Scholarship Research Proposal University of California, San Diego	Dec 2015
Gordon Engineering Leadership Scholar Engineering Leadership University of California, San Diego	Jun 2015
Friends of the International Center Scholarship Work Abroad University of California, San Diego	May 2014
Research Internships in Science and Engineering Research Internship DAAD (German Academic Exchange Service)	May 2014
Qualcomm Institute Summer Undergraduate Scholar Research Program University of California, San Diego	Mar 2014
Doris A. Howell Research Scholarship Research Proposal University of California, San Diego	Feb 2014

SKILL SET

Algorithms: Python (Pandas, Numpy, Scipy, Matplotlib, Seaborn, Scrappy), Tensorflow, R
Databases: Relational databases (PostgreSQL, MS SQL Server, SQLite)
BI Tools: Tableau, Power BI
Other: Git, Docker, Spark

CERTIFICATIONS

Deep Learning Specialization deeplearning.ai Coursera	May 2019
Tableau Server 10 Qualified Associate Tableau Software	Jun 2017
Data Mining University of California, San Diego Extension	Jul 2016
Python University of Michigan Coursera	Dec 2015