

## EDUCATION

### UNIVERSITY OF WASHINGTON MS IN INDUSTRIAL & SYSTEMS

#### ENGINEERING

Sept 2016 - Dec 2017 | Seattle, WA

GPA: 3.9 / 4.0

### SAPIENZA UNIVERSITY

#### BS IN ENGINEERING MANAGEMENT

Sept 2012- Mar 2016 | Rome, Italy

GPA: 103 / 110

## LINKS

Website: [GiovanniSinapi](#)

LinkedIn: [gioSinapi](#)

GitHub: [giovannisinapi](#)

Twitter: [@giovanni\\_sin](#)

## COURSEWORK

### GRADUATE

Software Engineering for Data Scientists

Machine Learning for Econometricians

Applied Neural Control

Machine Learning for Finance

Advanced Robotics

### UNDERGRADUATE

Business Management

Data Management

Operations Research

Statistical Methods

Control Systems

## SKILLS

### PROGRAMMING LANGUAGES

Python • R • C++ • MySQL

Julia •  $\LaTeX$

### BIG DATA

Apache Spark (PySpark, SparkSQL)

### SOFTWARE

Adobe Analytics • Matlab • Minitab •  
AMPL • Simio • Microsoft Office (Excel,  
Power Point, Word, Access)

## EXPERIENCE

### HOLLAND AMERICA LINE | DATA SCIENTIST

Feb 2018 – Present | Seattle, WA

- Applied NLP models for tokenizing over 2 millions of subject lines from promotional email campaigns and identifying patterns in open and click rates.
- Implemented a proximal gradient descent algorithm to solve logistic regression for predicting user's bookings with accuracy of 80%.
- Developed a multi-armed bayesian bandit algorithm for optimizing email send time for each customer.
- Modeled customer lifetime value using a modified BG/NBD approach and predicted future purchases for next 2 years.

### HOLLAND AMERICA LINE | DATA ANALYST INTERN

Jun 2017 – Sept 2017 | Seattle, WA

- Developed a web application with R-Shiny for statistical analysis and visualization of On Board purchases data to discover customer insights and drive strategic pricing changes.
- Implemented a divisive hierarchical clustering algorithm (DIANA) to identify the most popular Shore Excursions available at each port.
- Created a user-based collaborative filtering recommender system for predicting top 5 new user's first booking destinations, using a XGBoost model.
- Performed time series analysis to determine seasonality trends in Shore Excursions purchase and ARIMA forecasting models to predict booking volumes.
- Built Random Forest and Gradient Boosting Machine models for predicting how far in advance passengers book the cruise, achieving accuracy of 85%.

### OVERIT | FUNCTIONAL ANALYST

May 2016 – Sept 2016 | Rome, Italy

- Worked with a team on the development of an entire suite of multiplatform mobile applications allowing the planning and the management of the cleaning activities for the primary Italian train operator (Trenitalia SpA).
- Gathered customer requirements, wrote functional requirements and converted them to technical specifications.
- Worked closely with the development team in ensuring data integrity between models and databases.
- Developed and implemented test plans and test cases to ensure that high-quality standards were maintained.

## PROJECTS

### PAIRS SELECTION AND TRADING | UW DEPARTMENT OF COMPUTATIONAL FINANCE & RISK MANAGEMENT

Sept 2017 – Dec 2017 | Seattle, WA

Selected candidate pairs from a universe of stocks based on clustering techniques (K-Means, DBSCAN, Agglomerative Hierarchical Clustering) and developed a trading strategy using Kalman filter to estimate the (hidden) dynamic hedge ratio between the pair of assets and set in entry and exit rules.

### CLIMATE POLICE | UW DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Sept 2016 – Jan 2017 | Seattle, WA

Maintainer of the open-source project "Climate Police", for an in-depth analysis of global climate change. Developed interactive tutorials for users and implemented unit tests for reducing debugging time by 40%.