

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

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 clicks on email with accuracy of 80%
- Developed a multi-armed bayesian bandit algorithm for optimizing email send time for each customer

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), using R and PySpark, 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 in R.
- Performed time series analysis to determine seasonality trends in Shore Excursions purchase and ARIMA forecasting models to predict booking volumes for the next 2 years.
- Built Random Forest and Gradient Boosting Machine models in PySpark 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%.