

# Marco Edward Gorelli

## Education

**MRes, Mathematics of Planet Earth**; 2016-2017; Imperial College & University of Reading

**MSc, Mathematics and Foundations of Computer Science**; 2015-2016; University of Oxford

**BSc, Mathematics with Professional Practice**; 2011-2015; Brunel University London

## Open source (pandas)

- **Volunteer maintainer** since Jan 2020, have reviewed 98 pull requests and had 41 pull requests merged
- Hosted pandas sprint at **PyData Festival Amsterdam**, where I mentored 15 attendees (many of whom were first-time-contributors) while they submitted 20+ pull requests
- Added new method `DataFrame.to_markdown` (which was featured in the **v1.0.0 release notes**), fixed bugs, enhanced documentation, refactored old code, and clarified error reporting

## Experience

**Data Scientist at Samsung R&D Institute UK**; Nov18 - now

- Mentored fellow employees by co-organising internal machine learning reading group: presented on SHAP values, markov chains, and bayesian methods. Upskilled teammates by delivering internal workshop in `pre-commit` and on how it leads to more productive code reviews;
- Improved accuracy/interpretability of hierarchical forecasting models and maintainability of source code (*Prophet, statsmodels, Jupyter Lab, CircleCI, pre-commit, Google Cloud Storage, wily, SHAP*)
- Deployed end-to-end web-scraping dashboard, including tests, automated documentation, static type-checking (*Google Cloud Platform, streamlit, scrapy, ScrapingHub, pymongo*)
- Deployed end-to-end anomaly detection module for sensor data (*pytest, sphinx, MongoDB, mongomock, PySpark, AWS EMR+S3, Docker, mypy*)
- Debugged Python and C++ code, allowing for Python ML model to be reliably deployed to wearable (*Tizen Studio, opencv, scikit-learn, pandas*)

**Data Scientist at Sedex**; Jun18 - Nov18

**Data Scientist at Sensium**; Jan18 - May18

**Risk Analyst Intern at General Electric Capital International**; Jun13 - Jun14

## Other achievements

- Kaggle:
  - Competitions expert (currently in top 1% over users):
    - \* top 8% solution in *Tweet Sentiment Extraction*
    - \* top 8% solution in *M5 Forecasting - Uncertainty*
  - Discussions expert
- Passed Samsung “Advanced Software Engineering Test (C++)” (£500 reward)
- Coursera: “Deep Learning Specialization”, “Applied Data Science with Python Specialization”
- During BSc: Foster Award for “exceptional mathematical ability”, Level2 Award for highest grades