Angelos Papanastasiou

STATISTICAL PROGRAMMER & ANALYTICS ENGINEER

Profile

Analytics engineer with nearly 5 years of experience, specializing in robust R-based ETL, reproducible pipelines, and scalable BI. Own end-to-end data workflows (500M+ rows) and ensure reliable pipeline operations and on-schedule data refreshes, enabling faster, lower-error reporting.

Employment History

Senior Actuarial Analyst, Deloitte, Nicosia

SEPTEMBER 2022 — PRESENT

- Airline loyalty breakage analytics: Built end-to-end monthly workflow from raw client CSVs to Power BI dashboards covering ~500M rows (~10GB) on a high-RAM remote machine; leveraged data.table + parallel processing to finish multi-file updates in ~40 min. Enabled monthly tracking of breakage rate & liability (previously only bi-annual).
- "What-if" simulation for insurance limits (Council of Health Insurance, Saudi Arabia): Implemented R simulations with Excel front-end (10M+ rows; ~4-hour runtime) to test sensitivity scenarios (e.g., ±10% exposure), supporting authority evaluation of structural changes.
- Medical product study (Department of Health, Abu Dhabi): Conducted burning-cost analysis by ICD-10 combinations on historical claims/premiums to inform product design; currently under review for launch.
- Portfolio pricing (Greece): Delivered portfolio dashboards and GLM-based predictions with a disciplined workflow (train/test split, cross-validation, model selection), helping the insurer move from flat-rate increases to targeted adjustments by segment.
- Regulatory ETL automation: Standardized R workflows converting raw inputs to regulatory templates for 3 large insurers, reducing quarterly reporting from ~1 week manual effort to 2–3 hours and lowering error risk via scripted checks.
- Training and Development: Delivered internal and external training on R and Power BI.

Data Scientist, RETAILZOOM, Nicosia

FEBRUARY 2021 — SEPTEMBER 2022

- Complex data manipulation and report preparation.
- Implementation of machine learning models for predictions, and clustering algorithms.
- Developed price elasticity models, for identifying the price - sensitivity of multiple products across hundreds of stores.
- Developed and deployed custom Shiny apps, depending on the needs of the clients.
- Implementation of appropriate algorithms to automate daily procedures.

Special Research Scientist , University of Cyprus, Department of Mathematics and Statistics, Nicosia

SEPTEMBER 2020 — MAY 2021

- My research focused on time series and specifically on change-point detection algorithms. My tasks included simulation design, statistical programming, and literature review of the state-of-the-art methods in change point detection.

Details

+35799285827

aggelospapanastasiou905@gmail.com

Links

https://github.com/apapan08

linkedin.com/in/angelos-papanastasiou

https://aggelospapanastasiou.netlify.app/

Skills

Git

Predictive Modeling

Strong Analytical Skills

R/Shiny

Power BI

Hobbies

Football, Quiz Game Development

Education

MSc Data Science, University of Edinburgh

SEPTEMBER 2019 — AUGUST 2020

Grade: Distinction (77%)

Thesis: Analyzing patient flow with process mining and network analysis techniques (collaboration with King's College Hospital London).

Modules: Applied Machine Learning, Statistical Programming, Database Systems, Data mining, Probabilistic Modeling and Reasoning, Data Visualization.

BSc Mathematics and Statistics, University of Cyprus, Nicosia

SEPTEMBER 2015 — MAY 2019

Grade: First Class With Honours (8.64/10).

Modules: Linear Algebra, MATLAB, FORTRAN, Integration, Differential Equations, Complex Analysis.

Erasmus, Athens University of Economics and Business, Athens

SEPTEMBER 2017 — JUNE 2018

Grade: 9.62/10

Modules: Theoretical Statistics, Multi-variable Statistical Analysis, Linear Models, Probability Theory, Non-Parametric Statistics, Sampling, Time Series Analysis, Stochastic Processes.

Internships

Intern, CYENS, Nicosia

JUNE 2019 — AUGUST 2019

I have studied literature review on neural style transfer, experimented in Python with state-of-the-art libraries in deep learning, and investigated whether neural style transfer can be used to produce mosaic images.

Publications

- Back, C. O., Manataki, A., Papanastasiou, A., et al. (2021). *Stochastic Workflow Modeling in a Surgical Ward: Towards Simulating and Predicting Patient Flow.* In Biomedical Engineering Systems and Technologies (BIOSTEC 2020), CCIS 1400, pp. 565–591. Springer
- Anastasiou, A., & Papanastasiou, A. (2023). Generalized multiple change-point detection in the structure of multivariate, possibly high-dimensional, data sequences. Statistics and Computing, 33:94.