Giulia Vilone

Address: 14 Haverty road, Marino, Dublin 3
Email: giulia.vilone@gmail.com
Mobile: 087 2157716

Profile

Highly motivated professional with 5+ years of experience as data scientist and mathematical modeller in a science-oriented business, specialised in developing cloud-based software, data analysis and predictive modelling. I enjoy being part of a fast-paced environment and I am comfortable working towards deadlines. I perform well both independently and in a team. I am organized with the ability to plan and multitask, I am proactive, reliable and enthusiastic with an outgoing friendly personality.

Skills

- Proven experience in designing predictive models
- Excellent knowledge of scientific programming languages such as Python (mostly Pandas and Numpy packages), R (statistical language) and Matlab
- Proficient in MySQL
- Deep knowledge of the Microsoft Office Package, mostly Excel (able of programming macros in VBA), Access and Words
- Data visualization - familiar with R packages (GGplot, GGvis), Python package (matplotlib) and Tableau
- Good team worker
- Extensive communication skills

Education

- <u>British Institute and Faculty of Actuaries</u> - Diploma in actuarial sciences (part-qualified actuary). September 2011 – September 2013
- <u>Polytechnic of Milan</u> - Master degree in mathematical engineering. Thesis in financial mathematics. October 2005 – December 2007
- <u>Polytechnic of Milan</u> - Bachelor degree in mathematical engineering. Thesis in financial game theory. October 2002 – July 2005
- <u>Machine learning (linear/logistic regression, neural networks, dimensionality reduction)</u> online course on Coursera - 2016

Work experience

<u>Data scientist at Creme Global, Dublin - November 2012 - ongoing</u>
- Statistical analyses of food and cosmetic consumption data retrieved from national surveys
- Development of long-term predictive models to assess exposure to chemicals contained in foods and cosmetics. These models involve different mathematical techniques:

- Regression models (linear and logistic mostly)
- Cluster analysis
- Differential equations
- Supervise the development of new cloud-based software as product owner
- Writing scientific, peer-reviewed papers and technical reports
- Writing blogs for the company's website and newsletter
- Attending and presenting the results obtained from projects at scientific conferences (ISES and Predict are the most recently ones)

Main technologies:
- Python, mostly Pandas and Numpy packages
- R (GGplot, GGvis, Gdata are among the more frequently used packages)
- MySQL
- Atlassian Suite (JIRA & Bitbucket)

Activities carried out outside work:
- Attending events organized by the Society of Actuary Ireland and volunteer member of the Wider Fields Committee
- I wrote an article for the magazine the Actuary (see scientific publications)

Financial Analyst - Mediolanum International Funds Ltd., Dublin April 2011 - October 2012
- Profitability analysis on life insurance products (Unit Linked and Index Linked)
- Budget and forecast analyses
- Involved in the implementation of Solvency II
- Prepare monthly reports for the board of directors

Main technologies:
- MS Excel
- The actuarial program Moses

Policy Administrator at The Lawrence Life Assurance Co. Ltd., Dublin June 2010 - March 2011
Main tasks:
- Portfolio administration
- Organization of the administration office

Financial Services Consultant - Capgemini Italia. Assigned as external consultant to the actuarial office of Sud Polo Vita. Milan (Italy) January 2008 - May 2010
Main tasks:
- Operational risk analyses
- Budget and investment planning with Matlab.
- Writing technical documents
- Supervision of the normal portfolio activities, such as calculation of the maintenance commissions, claim (surrender, death and maturity) imports and revaluations.

Main technologies:
- Matlab
- MS Excel and Access

Scientific Publications

Compiled European Food Consumption Database. C. O' Mahony, G. Vilone. External Scientific Report, EFSA Journal, Supporting Publications 2013: EN-415.

Vilone G., Comiskey D., Heraud F., O'Mahony C. (2014): Statistical method to assess usual dietary intakes in the European population. Food Additives & Contaminants: Part A.

Vilone, G. (2016, August). Data dining. The Actuary, pp. 27-29.

J.S. LaKind, C.J. Burns, D.Q. Naiman, C. O'Mahony, G. Vilone, A.J. Burns & J.S. Naiman (2017) Critical and systematic evaluation of data for estimating human exposures to 2,4-dichlorophenoxyacetic acid (2,4-D) – quality and generalizability, Journal of Toxicology and Environmental Health, Part B, 20:8, 423-446, DOI: 10.1080/10937404.2017.1396704