# **Dervla Scully**

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#### **Personal Profile**

Highly ambitious and results-driven individual, with outstanding computer and data expertise gained through my degree in Computer & Data Science at UCD, and my 5-month industry internship at SAP. Self-motivated and detail-oriented, with a keen interest in the application of data analytics and machine learning in the professional services sector, to extract insights, improve service delivery, and drive decision-making.

### **Technical Profile**

Programming languages: Python, Java, R, SQL, Bash, Excel, C, Scheme (Lisp), Scala, C++, JavaFX, XML, JavaScript

Databases: MySQL, MongoDB, Apache Spark

Methodology: Agile

## **Education**

BSc Computer Science with Data Science, University College Dublin Grade: 1st Class Honors GPA: 3.99/4.2

2018 - 2022

**Relevant Modules:** Machine Learning, Cloud Computing, Data Science in Python, Programming for Big Data, Artificial Intelligence, Network Analysis, Information Visualisation, Data Mining, Probability Theory, Statistics for Economists

Leaving Certificate, Ardscoil na Tríonóide, Co. Kildare

2012 - 2018

**CAO Points: 577/625** Top 3.1% in Ireland in 2018

# **Industry Project**

## **SAP Internship Innovation Project**

July-August 2021

- Appointed project lead for an intern-led application development project during my internship at SAP.
- Developed a desk-booking application to support SAP in adopting a hybrid work model.
- Project Management Tasks: Maintained a Gantt Chart, organised sprints, delegated tasks, scheduled regular scrum and sprint review meetings, communicated with my teammates frequently to ensure work was being completed, and help provided where necessary.
- **Technical Tasks:** Formulated the scope, created wireframes, configured the SAP HANA database, set up the development space in SAP Business Application Studio, integrated with Github using SAP Cloud Connector, developed the front-end using SAP UI5 which is based on XML, JavaScript, and HTML.
- Skills acquired: teamwork, problem-solving, communication, initiative, decision-making, critical-thinking

# **Academic Projects**

# Final Year Thesis – A+ Grade

Sep 21 – May 22

Title: An Analysis of Electricity Usage for Households with Solar PV, Electric Vehicles, and Heat Pump Systems

- Performed an advanced analysis and comparison of Irish and UK energy data
- Carried out distribution, time series, and feature correlation analysis
- Applied principal component analysis (PCA) as a feature extraction and clustering method
- Conducted an advanced investigation into trends in power consmption data, leading to the identification of peak consumption periods which may cause stress on the network, as well as peak solar PV generation periods that are leading to grid exportation
- The investigation found strong similarities in the trends and distribution of the UK and Irish data, indicating that UK energy studies may be accurately generalised to Ireland
- The findings from this study will be of high value for the planning of Ireland's low carbon future

# Machine Learning Prediction Model – A+ Grade

Sep - Dec 21

- Built and evaluated an animal death risk prediction model from an animal shelter dataset
- Performed thorough data cleaning and preperation, and conducted feature selection using both Filler and Wrapper methods
- Trained and tuned a support vector machine (SVM), K-nearest neighbour (KNN), and naïve bayes classifier using cross validation on a training dataset
- Evaluated the performance of the classifiers on a test set based on precision, recall, F-Measure, balanced accuracy and error rate (BAR, BER), receiver operating curved (ROC) and area under the curve (AUC)

# **Work Experience**

## Internship Program, SAP March

2021 - Aug 2021

- Collaborated with the Integration team for 4 months.
- Designed integration-specific development scenarios using PI/PO & the Integration Suite.
- **PI/PO:** Utilised multipe adapters (SOAP, File, Mail, HTTPS, etc.), and employed various mappings approaches (Java, Graphical).
- **Integration Suite:** Developed interfaces within Cloud Integration, and proxies and policies within API Management. Integrated with Open Connectors.
- Troubleshooting & Analysis Tools: XPI Inspector, COE Inspector
- Shadowed various Integration Services, such as Integration Validation and Go-Live Support, performed these services on an internal test system, and presented the outcomes to the internal team.
- Skills acquired: problem solving, critical thinking, learning, self-motivation, collaboration

#### Module Demonstrator, University College Dublin

Sep - Dec 2020

- Demonstrating for the first- and second-year modules Functional Programming, Discrete Mathematics, and Algorithmic Problem Solving
- Skills acquired: communication, patience

### Food and Beverage Assistant, The Heritage Hotel, Killenard, Co. Laois

March 2019 - Nov 2020

- Greeted, sat, and served customers in a courteous and cordial manner in a fast-paced environment.
- Delegated the daily duties to my colleagues.
- Communicated with my colleagues constantly and in a respectful tone to ensure effective teamwork and efficient service.
- Handled cash transactions accurately and dealt with occasional complaints from customers in a professional manner.
- Skills acquired: teamwork, communication, delegation, conflict management, customer service

#### RSM Ireland Accountants, Birr, Co. Offaly

2016 - 2018

Transition Year Work Experience 2016, Summer 2017 & 2018

- Accounts work and general office duties inputting invoices, VAT returns, bank reconcilliations, etc.
- Answered the phones and greeted clients arriving at the office in a friendly and professional manner.
- Skills acquired: professionalism, client communication, business etiquette

# **Skills and Competencies**

### **Teamwork & Communication:**

Worked on a large team at The Heritage, where I developed keen communication skills with co-workers and customers. Contributed to numerous academic and industry group projects, from which I advanced my communication skills for project management. I am articulate with strong written, verbal and non-verbal communication skills across internal and external environments.

#### **Public Speaking & Presenting:**

Nominated to speak on behalf of the Internship Team at an internal SAP talk with 150+ colleagues in attendance. Completed a presentation series at SAP, performing 3 technical presentations and adopting numerous presentation techniques. Presented on multiple academic projects to staff and my classmates at UCD.

#### Time management:

I consistently meet all college deadlines and have maintained a high 1st Class Honours since first year, whilst balancing a part-time job. At SAP, I simultaneously completed weekly tasks on time and to a very high standard for both the Integration team and the Internship team, while also leading an innovation project.

# **Personal Achievements**

#### Awards:

- UCD Entrance Scholarship based on Leaving Certificate results
- Employee of the month, The Heritage, July 2020.

# Mentoring:

- Mentor at 2019 CS Sparks 6-week programming workshop for transition year girls
- Mentor at 2020 GirlScript Ireland Bootcamp 4-week program teaching Java to coders of all levels

#### **Certified Training:**

- SAP Formal Training: SAPTEC NetWeaver AS Fundamentals, ADM315 Workload Analysis, HANA CoE
- openSAP Course: Managing Java Systems on SAP NetWeaver, Developing Web Apps with SAPUI5