As part of the RD901 Researcher Knowledge and Intellectual Abilities class, some of the courses I did are the following: MATLAB–Online Course, Excel 2010: Advanced Functions and Formulae, Introduction to LaTeX Training, Excel 2010: Basics, Microsoft PowerPoint–Online Course, Conference Attendance ICMI 2017, Research group meeting attendance, Workshop attendance, Apply Design Thinking to your Research and Creating Webpages from Scratch–Online course.

After having studied the Excel 2010 Basics Formulae (a) document and practiced the “Try This Yourself” sections as well as the advice and self-improvement tips on this study guide, I have an overall better understanding of the basics that this software makes available and the importance of creating and printing different worksheets, formulas, workbooks and charts. Moreover, the Advanced Functions and Formulae in Excel 2010 module was also an interesting module for me since I use it regularly to visualise my data and this is one of the reasons why I choose to explore the capabilities of the software (i.e. objective function optimisation with the solver add-in) even further by taking the 2 Excel courses (a) and (b). After having studied the Tutor Led Excel 2010 Advanced Function and Formulae (b) document and the practice sections, I now have a better understanding of the importance of scoping formulas and generally planning and testing each function to ensure the correctness of formulas.

Both courses motivated me to create my own spreadsheets and put into practice some of the new things that I had learnt for example experiment with editing basic and more advanced formulas (i.e. VLOOKUP() and HLOOKUP()) in a table setting which contained data, afterwards I tried out a variety of chart types to visualise the data and also print up to a range on the workbook I was experimenting. By putting the knowledge into practice I felt self-gratification when I finally got it right and also more knowledgable in terms of understanding differences between cell and table referencing. These courses also helped me significantly when I have to do data analysis in data sets which strongly reflects on my scientific disciplines.

For example, after I had completed these courses I used Excel to relatively quickly and effectively split and concatenate large lists of PubMed Ids from several different files. Also these courses proved to be helpful in organising my experimental data and also during the visualisation of my experiment results when I was writing a paper named “An Analysis of Indexing and Querying Strategies on Technologically Assisted Review Tasks”. In addition, while I was working on the Ministry of Defence in Athens I was using the MS Excel software in combination with the Microsoft Access database in order to produce a variety of parametric spreadsheets which required performing complicated formulas for example a series of vlookups and hlookups in order to assign soldiers and officers in a certain location during their service.

For the MATLAB course I had to install the VPN Access Manager and the version MATLAB R2016a for windows from the recommended software provided from the University of Strathclyde (UoS), in order to use it. I learnt how to calculate different metrics, multiple graph-examples exported from MATLAB to .pdf format and a simple GUI example. The material for the online course provided by UoS was accessed from the SharePoint platform provided from the UoS. This course, has given me insight into the capabilities of the multi-paradigm numerical computing environment MATLAB. The official handbook guide, helped me explore a variety of aspects of this software tool, including a variety of data structures and when to use them, programming with MATLAB, the ready-to-use statistical functions, how to construct my own function, graphics, the data analysis techniques, the Gui provided by MATLAB which has very similar elements to the Swing library for the Java language and this helped me to reflect and revert back to past desktop application projects and make a repetition of what I had implemented. Furthermore, I studied various YouTube videos provided from the official MATLAB YouTube channel, which gives further helpful information while at the same time you implement coding tasks.

The courses in LaTeX provided by Strathclyde SharePoint and the one that I attended have helped me significantly in the process of establishing fundamental LaTeX skills to my knowledge-base for writing my PhD thesis Draft and a paper draft. During this process I had the opportunity to learn a variety of things. After having learnt a number of things about LaTeX I started producing for my Draft thesis and other personal and business documents of mine table of contents, list of figures, complex formulas, list of tables, adding bookmarks and hyperlinks sections, subsections, various types of enumerations including customisation options for enumerations, declaring Bibtex bibliographies so that it can parse the references. LaTeX has become my favourite typesetting system for my documents. Although I had used LaTeX when I was writing my Bachelor thesis these series of courses helped me to expand even more and use even further LaTeX for example to save references of papers I have read but it has also helped me to create different versions of my resume and cover letters by using LaTeX.

I attended some of the SiSRG presentations and I also attended a variety of talks given in research groups, PhD conferences in the Edinburgh Napier University, University of Glasgow, University of Dundee, Heriot Watt, University of Strathclyde and in the University of Stirling about information retrieval, human computer interaction and natural language processing. These talks helped me to structure my own research in presentations which I presented in the research digest meetings organised by PhD students of the science faculty and the SiSRG research group. After being taught the Creating Webpages from Scratch course I put into practice what I learnt and started creating my own static webpage which can be accessed here it21208.github.io . This made me feel satisfied to demonstrate the illustrious steps of my career so far.

Finally, I have attended the ICMI 2017 conference and the SIAA 2017: 1st International Workshop on Investigating Social Interactions with Artificial Agents. Some of the concepts covered in the workshops included the following issues: Nonverbal communication, Occurrence distribution, Automatic Recognition with the PsychoFlickr Corpus, Time distribution across laughter and the SSPNet Mobile Corpus, Pictures appear to act as social signals. These concepts reflected on me by making me think about other intertwined aspects like how peoples physical appearance, voice and face behaviour, monologue and dialogue space and enrollment and overlapping affect everyday communication. Another talk which concentrated about images and image processing in the context of social made me think this even further for example how genders process and understand images and how emotional intelligence affects this.

The ideas discussed intrigued my interest and made me want to investigate this further and find out how much of our time is invested in nonverbal communication during speech disposition and it turns out to be 25% and that although small percentage it is significant and predictive of the main outcome of the interactions between people. So it made me draw the conclusion that we can also train AI systems to predict the final outcome of discussions and personality traits by capturing these nonverbal data (i.e. facial expressions, low-level visual characteristics) from humans.

In general my knowledge in the last few years in the Computer science field has shifted to a greater level especially in Python, SQL, LaTeX, VBA, R and simulation and tracking software. This was a direct result of my constant efforts of learning and solving challenges both in industry (working as researcher and programmer analyst in KEPYES and an internship in Newslines) and in the university. My research and practical knowledge in the fields of information retrieval, machine learning and text processing has expanded significantly. Also when I was in the industry apart from my other duties I did a lot research on HLA architecture and in LVC, RTI and DIS protocols as part of my effort to implement the interconnection between the the simulation software VBS3 with SBP through the LVC game interconnection software.