

# Dominic Palmer

[dominicpalmer.org](http://dominicpalmer.org)  
[github.com/dominicpalmer](https://github.com/dominicpalmer)  
[dominicpalmer\\_@outlook.com](mailto:dominicpalmer_@outlook.com)

Mobile: *On request*  
Location: Brighton, UK  
Age: 26

## SUMMARY

An Imperial College Applied Mathematics MSc graduate and passionate software engineer, with 3 years industry experience spanning full SDLC software development, data science, statistical programming and machine learning for research and development.

## LANGUAGES & LIBRARIES

- C# | C++ | Python | Bash/Shell | SQL Server | JavaScript | HTML | CSS |  $\text{\LaTeX}$
- .NET Core | Dapper ORM | DbUp | Swagger/OpenAPI | REST MVC Web APIs | MSTest | xUnit
- Standard Template Library | GoogleTest | GNU Make | NumPy | Pandas | Matplotlib | scikit-learn

## TOOLS & WORKFLOWS

- Git (CLI) | GitHub | Azure DevOps | Travis CI | Jira | Confluence | Rally | Trello | Slack
- Linux | Windows | VSCode | Visual Studio | Neovim | Tmux | Zsh | JupyterLab | TeXstudio
- Agile | Scrum | Waterfall | CI/CD | Unit testing | TDD | International teamwork (UK, USA, Ireland)

## EXPERIENCE

### Applied Systems

Brighton, UK; Belfast, NI (remote)

*Junior Software Engineer*

*Nov. 2020 – Present*

- **SchemeRater:** In a team of two, we developed and deployed a set of microservices that calculate insurance premiums in real time according to pricing models specified by insurers. (C#, .NET Core, SQL Server)
- **Applied RDS Web Portal:** Created an internal web portal that provides management functionality for insurance document templates. (ASP.NET Core, JavaScript, HTML, CSS, jQuery, Bootstrap)
- **Applied Relay:** Regular commits made toward Applied Belfast's flagship insurance pricing and management software, plus satellite web and desktop applications. (C#, .NET, ASP.NET, WinForms)

### First Central Insurance & Technology Group

Haywards Heath, UK

*Statistical Analyst/Data Scientist*

*Jan. 2019 – Oct. 2020*

- **Web scraping:** Developed a collection of web scrapers to efficiently scrape, parse and merge large volumes of quote XMLs. (Python, xmldict, json, BeautifulSoup)
- **Machine learning:** Built aggregator classification and renewal propensity models, plus dimensionality reduction and clustering notebooks using principal component analysis. (Python, Pandas, NumPy, scikit-learn, Matplotlib)
- **Rating engine development:** Greenfield development of an in-house insurance pricing engine written in Willis Towers Watson's proprietary scripting language, plus a GBM-based model optimisation framework.

### Pre-2019

Brighton, UK

*Bartender, Mitchells & Butlers; Statistical Analyst, InterAnalysis*

*Sep. 2017 – Apr. 2018, Jul. 2016 – Aug. 2016*

## EDUCATION

### Imperial College London

London, UK

*Master of Science in Applied Mathematics; Distinction (76%)*

*Oct. 2016 – Oct. 2018*

- **Research project:** Developed a genetic algorithm in C++ that simulates tumour growth in two and three dimensional space, based on a mathematical model of evolutionary ecology (88%).

### University of Sussex

Brighton, UK

*Bachelor of Science in Mathematics; First Class Honours (89%)*

*Sep. 2013 – May 2016*

### Cardinal Newman Sixth Form College

Brighton, UK

*A Levels; Mathematics (A\*), Physics (A), Chemistry (B), plus the Extended Project (A)*

*2011 – 2013*

### HarvardX: Harvard University's Online Course Facility

Online

*CS50 Introduction to Computer Science, Verified Track; Distinction (93%)*

*Sep. 2017 – Jul. 2018*

- **Coverage:** A 12 week course covering data structures and algorithms, software development in C, plus web development using Python (Flask), JavaScript, HTML and CSS.