## PERSONAL DETAILS

- Name Daniel Tattan-Birch
- Address London
- Email dantb@hotmail.co.uk
- Wationality United Kingdom, Ireland (EU Citizen)
- LinkedIn linkedin.com/in/dantb
- Website dantb.dev

### SKILLS

Functional Programming
Scala
Typelevel
Functional software design
OOP software design
Testing techniques
Data Modelling
Content Management Systems
Databases
Web API Development
Distributed Systems
Cloud-based Automation
Third party integrations

# DANIEL TATTAN-BIRCH

Senior Software Engineer with a preference for pure functional programming. I built and now maintain the <u>ITV News</u> backend systems using a Scala <u>Typelevel</u> stack. I have previous experience building statistical models in Scala and financial trading applications in C#.

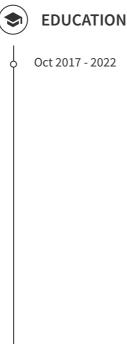
Broadly, my technical interests include domain modelling, software design patterns, functional programming and their application to real world problems. Working on my <u>MSc dissertation</u> also sparked an interest in effect systems and programming language research.

My GitHub username is <u>dantb</u> and an extended version of this CV can be found online at <u>dantb.dev/cv</u>.

# ) WORK EXPERIENCE

Dec 2018 - Present	<b>Senior Scala Engineer</b> ITV, London
	Developed distributed systems supporting various ITV products such as ITV News, ITVX and sites for various programmes. All our backend applications are built using a Scala Typelevel stack.
Dec 2017 - Dec 2018	<b>Software Engineer</b> Football Radar, London
	Football Radar perform statistical analysis on data collected from football matches and generate real-time predictions based on the models. I was part of the modelling team, working closely with data scientists to understand and implement algorithms to improve our predictive models.
Sep 2015 - Dec 2017	<b>Full-Stack Developer</b> Fidessa, London
	Developed enterprise investment management systems for financial

institutions. Specifically we built native .NET frontend applications and C++ microservices.



#### M.Sc. in Software Engineering, Distinction University of Oxford

A flexible part-time course designed for software professionals. Initially joined with the goal of filling my most obvious knowledge gaps. This was broadly successful and the course played a big part in guiding my technical interests.

Dissertation: Comprehending Pure Functional Effect Systems

**Dissertation keywords:** Haskell, Scala, Functional Programming, Effects, Design Patterns, Monads, Extensible Effects.

**Course keywords:** cloud computing, big data, database design, deep learning and embedded systems.

Mark: 80.

2012 - 2015

**B.Sc. in Mathematics, First-class Honours** University of Warwick