

Ian Huston

Engineering and Data Science Leader – bringing data thinking to software development teams, and agile methodology to data scientists.

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May 2018 - Present: Engineering Director, Pivotal R&D, Dublin (now part of VMware Tanzu)

Software Engineering Director in Pivotal Cloud R&D org focused on attracting, growing, and retaining exceptional product engineers to deliver industry leading distributed cloud technologies.

- Directing all five engineering teams in Dublin (35 people), including Kubernetes and Site Reliability Engineering efforts. Accountability for team composition and health, project execution and success as part of greater product success, and ideation for future team opportunities.
- Completed explore phase of Pivotal's first Kubernetes offering (Pivotal Container Service PKS) with 100+ enterprise customers, and successfully handed over to US location for expand phase.
- Running global production instance of Pivotal Tracker with a small platform operations team developing appropriate Site Reliability Engineering approaches to Kubernetes and Cloud Foundry.
- Recent focus on designing a container based secure software supply chain into Pivotal's internal product delivery process.
- Leading recruitment for the Dublin engineering team, responsible for strategy, execution, and decision making as hiring manager.
- People management of 20+ engineers (direct & indirect) including 5 managers. Accountable for all people issues including design and execution of performance & compensation reviews, professional skills development, performance improvement planning, and reductions in force.

2017 - 2018: Associate Director, Pivotal Labs, Dublin

Led a team of 15 engineers, product managers, and design consultants and was responsible for:

- representing Pivotal in customer presales interactions and workshops,
- working with sales teams in Europe and the US to design and book client projects,
- ensuring team and project success with delivery teams,
- acting as the liaison and escalation path for client stakeholders,
- recruiting & managing of engineers, product managers, product designers, and data scientists.

2016 - 2017: Principal Data Scientist, Pivotal Dublin

Led consulting teams using data science with Python (PyData stack), Java Spring, Apache Spark, and PostgreSQL/Greenplum. Deployed cloud based data science micro-services using Spring Cloud Data Flow and on Cloud Foundry, AWS, and GCP.

2013 - 2016: Senior Data Scientist, Pivotal London

Consulted on multi-disciplinary teams with major clients working on data science specific and broader app development engagements.

2010 - 2012: Postdoctoral Researcher, Queen Mary, University of London

Designed and built distributed numerical computational systems for early universe cosmology using Python, Fortran, and C. Created open source libraries still used in the field.

Education

2006-2010 **PhD, Theoretical Cosmology**, Queen Mary, University of London

Large scale numerical simulations of physical conditions during the Big Bang.

2005-2006 **MSc (with distinction), Theoretical Physics**, Imperial College London

2001-2005 **BSc (1st), Mathematical Physics**, University College Dublin

Technical Experience

Programming Languages **Python:** Over 10 years experience with the scientific Python stack.
Java: Extensive use of Java in client projects over 5 years including Spring.
Working knowledge of **R, Fortran, MATLAB, Kotlin, C**

Other Tech Kubernetes, Concourse (CI/CD), Tableau, PostgreSQL/Greenplum, Cloud Foundry

Team and Project Highlights

Recruitment & Retention Responsible for designing and implementing the recruitment strategy for engineers in our Dublin team, with a focus on improving the inclusivity of our interview process, and diversifying our candidate sources. Working directly with internal recruitment & sourcing team, and our interviewing engineers, I am the key decision maker for all engineering hires in the office.

Production Operations Directed the operations team running the global production installations of Pivotal Tracker, a leading agile project management tool with 100k+ daily users. With a data driven approach using Site Reliability Engineering techniques, and a solid technology base of Cloud Foundry and Kubernetes, we operate a 24/7 on-call policy with only a handful of call outs each year.

Kubernetes system Directed 3 engineering teams on Pivotal's first Kubernetes product, Pivotal Container Service (PKS), balancing team and people health with product success and senior stakeholder management. Worked closely with product leadership to scale customer base up to 100+ significant enterprise customers as part of our initial product exploration phase. Designed and executed handover plan to a US based team over 6 months with emphasis on sustainable working conditions, continued product success, and enabling new teams for maximum success.

Workshop Facilitation Delivered workshops on many data science and product related topics including: data discovery and exploration workshops for product teams & data scientists, idea generation and prioritisation workshops for CxOs & LOB leaders, agile development & Lean product workshops for product teams and as part of university courses, conference tutorial track on using Cloud Foundry with the Python PyData stack for practicing data scientists.

Top 10 Car Maker Developed a new data driven supply chain ordering process for a global top 10 automobile manufacturer. This system is now in production across European markets and realising savings of millions of Euro per year. Led the 4 data scientists

in our 10 person team through the 6 month project, which included guiding client data scientists in Java & Python, Test Driven Development, Pair Programming, and coordination as part of a User Centred product team. *Python, Hadoop, Java, Cloud Foundry*

Global High Street Bank	Designed a new personalised messaging experience for retail customers. The tailored communications app for retail users incorporated insights and predictions from individuals' live transaction data. Driving the iOS application is a pipeline of data processing and transforming micro-services, including overdraft entry prediction, anomaly detection and simple thresholding. Led the data science efforts of our combined team of data engineers, software engineers, and product managers for 6 months. <i>Spring Cloud Data Flow (Java), Python, Cloud Foundry, AWS</i>
Gaming group	Built data quality pipelines and entity resolution models to combine data sources from multiple online gaming & gambling brands into a single view of the group's customers. <i>PostgreSQL UDFs, R</i>
Leading Global Reinsurer	Introduced new algorithmic techniques to reduce simulation time in a global reinsurer's catastrophe modelling from weeks to minutes. Built a parallel computation system which enabled growth of simulation size from small national regions to continent sized data sets. <i>R</i>
Premium Car Brand	Analysed live car telemetry data to create a premium service appointment booking system for the UK dealer franchise of a leading European car manufacturer. <i>Python, Jupyter notebooks, Java, Cloud Foundry</i>

Further projects include data visibility in Oil & Gas sector, IoT asset management, and airport crowd visualisation.