

# TOM SMITH

Data-driven business intelligence and insight leader. I use modern technical tooling, and a career history of front-line operational and improvement experience, to find and present the important stories hidden in business data.



## EXPERIENCE

Present  
|  
Dec 2024

### Head of Activity Analysis & Forecasting

Nottingham University Hospitals NHS Trust

Nottingham

Leading a team of data analysts and data scientists producing operationally impactful analysis to inform senior leadership decision-making.

- Producing Demand and Capacity modelling methods, focusing on inpatient activity, beds, and operating theatres.
- Developing modelling to support NUH's annual planning process, which seeks to balance patient activity, staff resource, and financial resource to arrive at achievable annual plan.
- Developing waiting list descriptive and simulation work, including outreach with stakeholders to propose different ways to approach existing problems (eg. queuing theory, Discrete Event Simulation, and digital twins).
- Developing capability for event-driven analytics, including by data-modelling and joining raw datasets which are not routinely used for decision-making.
- Forecasting hospital occupancy over periods of discontinuity in patient and staff behaviour, such as holiday periods, and strike periods.

Apr 2022

### Insight Manager

Nottingham University Hospitals NHS Trust

Nottingham

Leading the Business Intelligence (BI) & Analysis function in the Family Health division, including Maternity, Neonatal, Children's Hospital, and Reproductive Health directorates.

- Implemented BI improvements giving leaders timely & consistent access to visual performance indicators
- Created productivity improvements to enable deep reporting with available resource
- Developed team skills, including move towards collaborative and reproducible analytical methods
- Built customer relationships to improve data literacy, including training on using Statistical Process Control (SPC) charts
- Ensured continuity of approx. 100 timeseries metrics during replacement of complex Electronic Patient Record system
- Discrete Event Simulation of patient pathways

## CONTACT INFO

✉ [tomsmith\\_uk@hotmail.com](mailto:tomsmith_uk@hotmail.com)

in [linkedin.com/tomsmith-uk](https://linkedin.com/tomsmith-uk)

github [github.com/ThomUK](https://github.com/ThomUK)

## SKILLS

Strategy development

Customer communication and requirements planning

Technical lead, connecting operational need with analytical detail as required

Champion and trainer of modern reproducible analytical methods





Team leadership within complex organisations, using complex data sources

*This CV was made with [R](#)*

*Source code here:*

[github.com/ThomUK/tom\\_smith\\_cv](https://github.com/ThomUK/tom_smith_cv)

*Last updated: 2025-04-24*

Dec 2020	<b>Principal Analyst (Maternity Improvement)</b> Nottingham University Hospitals NHS Trust  Nottingham Developing analysis in support of the hospital's Maternity Improvement Programme. <ul style="list-style-type: none"> <li>• Developed robust reporting pipelines for clinical and management data</li> <li>• Improved engagement of the business with their data through outreach and linked storytelling</li> <li>• Implemented Statistical Process Control techniques to separate signals from noise</li> <li>• Enabled governance processes to be confident of the quality and repeatability of reported information</li> <li>• Created new insights by combining datasets across sources</li> </ul>
Sep 2019	<b>Paternity leave</b> Home  Nottingham Time at home with my young family, overlapping with the COVID pandemic. Decision to upskill in analytics. <ul style="list-style-type: none"> <li>• Learned the "R" statistical programming language</li> </ul>
Feb 2019	<b>UK Head of Quality</b> Masonite International  Barnsley Led a team across 7 regional manufacturing facilities <ul style="list-style-type: none"> <li>• Introduced daily BI reporting of quality status for key sites at product line and manufacturing cell level (PowerBI)</li> <li>• Managed internal &amp; external customer feedback, scrap, rework, and raw materials consumption visibility</li> <li>• Supervised regulatory compliance, including ISO 9001:2015 validation</li> </ul>
Jan 2018	<b>Technical Engineering Manager</b> Door-Stop International (part of Masonite)  Huthwaite Managed a technical team through daily operations, new product introduction, and capital investment planning.
Apr 2017	<b>Continuous Improvement Champion</b> Door-Stop International (part of Masonite)  Huthwaite Enabled quality and delivery improvements through the use of data for problem solving, together with an engaged shop floor.

Apr 2013

### Business Transformation Coach

Sharing In Growth UK (hosted by Rolls-Royce)

Derby, London

Leading a cross-functional improvement team on behalf of the UK Government. Raising the capability of UK aerospace suppliers to capture growth of the aerospace market and other associated high value manufacturing sectors.

- Led a team comprising Supplier development engineers, Value engineers, Manufacturing engineers, and Purchasing specialists
- Designed and delivered concentrated 4 year training and development programmes to UK Aerospace suppliers
- Quantified financial benefit

Apr 2017

Feb 2012

### Lean Supplier Development leader

Rolls-Royce Plc

Derby, Paris

Developing strategic supplier capability to meet quality, deliver, and cost requirements.

- Diagnosed opportunities for improvement
- Agreed development plans with supplier top management
- Delivered practical coaching of shop-floor and management to achieve improvements
- Quantified operational cost benefits

Jun 2006

### Senior Engineer (Supplier Production Management)

Toyota Motor Europe

Derby

Tier 1 supplier production preparation - from draft drawing release to full volume production.

- Using core Toyota tools (Toyota Way, PDCA, Practical Problem Solving, Toyota Business Practices) to find facts at shop floor level, break down problems, find root causes, and agree and implement sustainable countermeasures
- Led production capacity confirmation, enabling fast vehicle launch ramp-up
- Built close working relationships between Design, Quality, Production Control, Vehicle Planning, Purchasing, and Tier 1 suppliers
- Led kaizen activity at Tier 1 suppliers



## SELECTED PUBLIC WORK

2024

### Health & Care Analytics Conference Conference E-lab

Anatomy of a waiting list

Online

How well do we understand our waiting lists?

Video recording: [https://youtu.be/3peqTEI\\_ZAQ?t=130](https://youtu.be/3peqTEI_ZAQ?t=130)

Package code: <https://github.com/nhs-r-community/NHSRwaitinglist>

- 2023
  - Conference Talk**  
 Beginner's guide to the R package {purrr} 📍 Online  
 Video recording: <https://youtu.be/laKYVuEIROs&t=2146>  
 Slides: <https://thomuk.github.io/2023-NHSR-Conf-Presentation>
- 2022
  - Conference Talk**  
 Introducing my {SPCReporter} R package 📍 Online  
 Video recording: <https://youtu.be/fWYehE5U6Vs&t=2862>  
 Slides: <https://thomuk.github.io/2022-NHSR-Conf-Presentation>
- 2021
  - {NHSRplotthedots} R package author**  
 R package to create Statistical Process Control (SPC) charts at scale 📍 Online  
 Repository: <https://nhs-r-community.github.io/NHSRplotthedots>



## EDUCATION

- 2017  
|  
2016
  - Free Code Camp**  
 Full Stack Web Development Certification 📍 Online
- 2002  
|  
1998
  - University of Wales, Swansea**  
 BEng (hons) Mechanical Engineering 📍 Swansea