DR TOM GOODMAN BEM

SFHEA FBCS FRSA FBS

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EXPERIENCE

Software Developer, Community Lead, Account Champion, & CSR/D&I Champion

CGI (formerly BJSS)

📅 Sep 2023 – Ongoing   📍 Birmingham, UK

- Working as a Senior Consultant Software Developer and Data Engineer, originally working for a flag carrier airline, and more recenlty for a large betting/gambling company. My experience currently lies in TypeScript, Python, and .NET.

- Some experience working in a Tech Lead role, accelerating development, supporting and growing other developers, and identifying and mitigating short to medium-term risks to project delivery.

- Coordinating the BJSS Birmingham/Milton Keynes community, ensuring that it properly serves the hundreds of BJSSers that belong to it, devising community strategy, and engaging with a variety of stakeholders to deliver novel initiatives. Regular presentation slot in quarterly Town Halls to update everyone on community progress and upcoming events.

- Collaborating closely with project leadership on resourcing, onboarding, and local schemes (e.g. quarterly retros and socials) for regional resources on client. Strategic planning for community, culture, and people-related aspects of account, including solutions for poor sentiment survey results amongst certain categories of resource. Using previous experience to spearhead initiative to run hackathons with client - utilising their office collaboration space - to promote agile working practices, and build a pipeline of work for the account. Close work with CGI colleagues to facilitate similar initiatives.

- Working with the local tech community, including meetups, conferences, not-for-profits, and educational institutions to deliver on BJSS's corporate social responsibilities, doing what we can to support events and initiatives, including sponsorship and facilitating the use of our Birmingham office as free of charge event space. We now support a number of local meetups including .NET/MAUI, Women in Tech, GoLang, and DevOps.

- Improving knowledge sharing and development for Birmingham/Milton Keynes BJSSers by restarting the 'Lunch and Learn' initiative, with a mix of technical talks and D&I focused offerings - including working with the People team to highlight and organise events around annual commemorations such as LGBTQ+ History Month, International Women's Day and Black History Month. Coordinated over 50 Lunch & Learns in the last year.

- Representing over 60 employees in TUPE consultation process - requiring clear and effective communication, managing, understanding, and voicing concerns. Appropriate framing of complex topics to a large diverse audience, and collaborative but 'critical friend' approach to work with transferee. Effectively coordinating with other reps on legal and financial areas, including building a take-home pay calculator to create representative graphs, and explaining TUPE through Legislation and relevant case law.

ACHIEVEMENTS

🏆 **Medallist of the Order of the British Empire (BEM)**
For services to Technology in the West Midlands

🏆 **Future Face of Technology and Innovation, 2020**
Greater Birmingham Chamber of Commerce

🏆 **Rising Star in Tech, 2019**
Silicon Canal

🏆 **The Great Achievement in EPS Award**
EPS Awards 2020

🏅 **EPS Westmere Scholar 2019/20**
University of Birmingham

📖 **Senior Fellow, Higher Education Academy**
In July 2020 I was awarded Senior Fellowship of the HEA, recognising in particular my work with HackTheMidlands and at the University around education and diversity. This makes me the youngest ever to be a senior fellow.

❤️ **Sponsorship Raised**
Since 2016, I have raised over £170,000.00 for local events and initiatives, including TechMids, HackTheMidlands, and the Women in Technology Conference - from sponsors including AWS, BT, BJSS, Capital One, Arm, and IBM.

ADDITIONAL ROLES

🎤 **Lead Organiser**
TechMids Conf 2025

🖥️ **Visiting Lecturer/Teaching Fellow**
School of Computer Science, University of Birmingham

🐙 **Freelance Consultant**
Various Organisations

👥 **Former Executive Committee Member**
Future Faces, Greater Birmingham Chamber of Commerce

Lead Organiser
TechMids Conference

📅 Mar 2025 – Present   📍 Birmingham, UK

- Leading a team of volunteers in running a community-led not-for-profit full-stack conference, with an attendance of over 200 technologists, and speakers from AWS, Spotify, GitLab and more. Roles and responsibilities include venue, ticketing, sponsorship, marketing, and handling the call for proposals.
- Heading up marketing, including developing a social media brand, writing and coordinating announcements, and monitoring and improving engagement, maintaining momentum etc. - working to bring the local tech community together

Research Fellow in Mathematical Modelling and Motion Capture
Institute of Digital Healthcare, WMG, University of Warwick

📅 Nov 2022 – Sep 2023   📍 Coventry, UK

- Worked on both the ARME Project https://arme-project.co.uk/, which seeks to build a VR practice tool for solo musicians to practice in simulated ensembles, and on a markerless motion capture project, assessing the efficacy of markerless techniques in healthcare interventions in contrast to current gold-standard (marker-based) techniques.
- Included technical roles such as software development (MATLAB, Python, C++), scientific research, modelling, data analysis, simulation, and paper writing/publishing, as well as non-technical roles including organisation of away days and journal club, team management, and community engagement.

Chief Executive Officer & Lead Organiser
HackTheMidlands CIC

📅 March 2016 – Ongoing   📍 Birmingham, UK

- Founded HackTheMidlands in 2016 (incorporating in 2018) - a creative marathon open to anyone, not just university students - providing a unique environment for people to learn new skills, build innovative projects, and present their work to other attendees, and sponsors.
- Have since run seven iterations of the event, working with sponsors including BT, Bentley, TFWM, and IBM, and engaging thousands of participants over the years.
- Stakeholder engagement with sponsors, attendees, and local community organisations.
- Spearheaded the transition to online delivery in 2020 and 2021, allowing us to engage over 1100 participants globally.

Treasurer & Community Engagement Officer *(previously Co-chair, Inclusion Officer, Secretary)*
BCS Birmingham Branch

📅 April 2016 – Ongoing   📍 Birmingham, UK

- Raising awareness of the Organisation, coordinating running of monthly tech talks for the local community, handling finances, and increasing student audience.
- Worked with HQ to reform BCS Fellowship criteria and applications process to recognise diverse and atypical contributions to technology.

Former Committee Member
Nominations Committee, The Royal Institution

Former Trustee & Director
University of Birmingham Guild of Students

Former Vice-Chair of Governors
Langley Primary School, Solihull

Former Trustee
The Burgon Society

EDUCATION

Ph.D. in Computer Science
University of Birmingham

📅 Oct 2018 – Mar 2022

Thesis title: Geometric Approaches to the Pitch Detection of Acoustic Musical Signals

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B.Sc. Computer Science (Class I)
University of Birmingham

📅 Oct 2015 – July 2018

SELECT PUBLICATIONS

A Geometric Framework for the Pitch Detection of Acoustic Musical Signals
Tom Goodman, Karoline van Gemst, and Peter Tiño

📅 November 2020 (Accepted September 2021)

Journal of Mathematics and Music. https://doi.org/10.13140/RG.2.2.22366.05444

Learn-Apply-Reinforce/Share Learning: Hackathons and CTFs as General Pedagogic Tools in Higher Education, and Their Applicability to Distance Learning
Tom Goodman and Andreea Ina Radu

📅 June 2020

SSRN Online Journal https://doi.org/10.2139/ssrn.3637823

Real-Time Polyphonic Pitch Detection on Acoustic Musical Signals
Tom Goodman and Ian Batten

📅 December 2018

18th IEEE International Symposium on Signal Processing and Information Technology (ISSPIT) https://doi.org/10.1109/ISSPIT.2018.8642626