TOM GOODMAN FRSA FBS MBCS

PhD Researcher - University of Birmingham

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📍 Birmingham, United Kingdom

EXPERIENCE

Teaching Fellow
University of Birmingham

📅 09/2018 - Ongoing   📍 Birmingham, UK

I am currently working as a Teaching Fellow for the Mobile and Ubiquitous Computing, and Team Project courses. I previously worked as a Teaching Fellow for the Operating Systems, and Concepts of Computer Science courses, an assistant lecturer for the Reasoning course, and a personal tutor and teaching assistant for the MSc/ICY Software Workshop (Java) course.

- Multiple 2-hour lectures/exercise classes & prep
- Small-group (30 students) teaching & lesson prep
- Marking and feedback of submitted work including both implemented programming solutions and essays
- Conducting one-to-one vivas for the end-of-term submission

Project Software Developer
Majestic (Majestic SEO)

📅 07/2018 - 09/2018   📍 Birmingham, UK

Worked in a small team to research and develop a new idea for the company - working specifically with NLP and Mathematical techniques and resulting in a fully implemented solution at the end.

Freelance Software Developer
Millennium Point

📅 06/2017 - 08/2017   📍 Birmingham, UK
🔗 http://www.lincgraph.co/

I put together and worked with a team on behalf of Millennium Point to design and develop a piece of data visualisation software that connected guests at an event based on their interests.

Software Developer
Vanti

📅 07/2017 - 09/2017   📍 Birmingham, UK

A 3-month placement at Vanti - a company specialising in Audio-Visual integration and smart buildings. Working on mainly the internal services (Java, Docker, NodeJS & Thrift) and with AV equipment/setup.

- Developed three internal projects to help the company - a suite of slack bots, a check-in system and a 'mood service' to keep track of (and feed back) the current mood of the office.
- Worked alongside the team, helping with the Royal Birmingham Conservatoire, a new multi million pound venue space in the heart of the city, with Vanti taking the helm on all AV solutions and installation.

EDUCATION

🎓 **BSc Computer Science (Hons)**
78% Overall

PUBLICATIONS

Real-Time Polyphonic Pitch Detection on Acoustic Musical Signals

18th IEEE International Symposium on Signal Processing & Information Technology

Tom Goodman & Ian Batten

📅 12/2018   🔗 tomg.io/isspit-1.pdf

ACHIEVEMENTS

⭐ **Lead Organiser - HackTheMidlands**

I founded, and headed up the organisation of a national, inclusive hackathon (see hackthemidlands.com). The event has ran for four consecutive years now, attracting around 1000 attendees overall.

👑 **CSS UoB President (@CSSBham)**

I was the president of the departmental society for computer science at the university for 3 consecutive years, and organised in excess of 150 events so. I'm now acting as the Secretary - supporting and nurturing this year's committee.

🔑 **President-Elect - Guild of Graduates and Alumni Association (GGAA) - UoB**

I'm the Vice-President, and President-Elect of the GGAA. Representing over 300,000 alumni of the University of Birmingham, I work to organise events, and bring together alumni and current students in a variety of initiatives.

EXPERIENCE

Analyst/Developer
Majestic (Majestic SEO)
📅 12/2016 - 12/2016   📍 Birmingham, UK

Following a successful summer internship, I was contracted by Majestic for a week to further work on a joint metric that I had done some work on over the summer.

- Independently worked to unify SEO metrics to create a single metric that accurately represented the data sets that the company has. This is being used by the internal analytics team to impact almost the entire client-base.
- Presenting the final result to the executive board and ensuring that a full handover of all work was conducted.

Undergraduate Demonstrator
University of Birmingham - School of Computer Science
📅 09/2016 - Ongoing   📍 Birmingham, UK

Following my first year at university, I was selected to be a module demonstrator because of my overall grades.

- I am predominantly responsible for mentoring the Software Workshop (Java) module, which consists of basic Java, as well as more advanced topics such as Threading, Sockets and Generics.
- Other modules include Language and Logic, Introduction to AI, Functional Programming, Data Structures & Algorithms and Robotics.
- Effectively teaching and/or mentoring content to students who are often completely new to the concepts, helping them to understand, and further, to learn them.
- Working alongside other demonstrators to ensure that help is provided quickly and efficiently.

Software Developer
Majestic (Majestic SEO)
📅 07/2016 - 09/2016   📍 Birmingham, UK
🔗 https://labs.majestic.com/2016

A 10-week placement at Majestic, developing innovative ways to represent and interpret their data. Mainly working on frontend & UX, but also working on some backend too. Predominantly HTML, CSS & JavaScript.

- Part of an autonomous team, and the joint-architect of a few innovative data visualisations, with the overarching brief of "showcase the data that Majestic has".
- The data visualisations created were used shortly after by the marketing team with the largest clients of the company.

REFERENCES

Steve Pitchford - Development Director, Majestic

Jess Rose - Technical Manager at FutureLearn

Professor Andy Schofield - Pro-Vice Chancellor, UoB

ACHIEVEMENTS

Trustee - Guild of Students
I will be starting as a Trustee of the Guild of Students on 13th January 2020. The Guild is a registered Charity, and I will work on its governance.

Rising Star in Tech - 2019
I was awarded the Rising Star in Tech in the West Midlands at the 2019 Silicon Canal Awards for my work with the local community (https://siliconcanal.co.uk/the-birmingham-tech-awards-2019/)

Sponsorship
Since 2016, I have raised over £108,000 in sponsorship for tech events - including HackTheMidlands, and the Women in Technology Conference.

BCS National Conference
I gave a 25-minute keynote on "Hackathons - Engaging the next generation of members", resulting in huge interest from many branches and kickstarted an interest in hackathons at the BCS,

BCS Committee Member
I have been involved in organising talks and events. I have a number of roles, including outreach and engagement within the local and wider tech community.

SKILLS

Python	Data Science	Git

Leadership	Events	Mentoring

C	Java	JavaScript

Signal Processing	Research

Analysis	Algorithms

Technical Writing	Music

Governance	Management