

THOMAS A. GOODMAN

PERSONAL DATA

WEBSITE: <http://tomg.io/>
GITHUB: <https://github.com/tauomicronmu/>
EMAIL: T.A.Goodman@cs.bham.ac.uk

WORK EXPERIENCE

Current MAR 2016	Lead Organiser <i>HackTheMidlands</i> I am the Lead Organiser and Founder of HackTheMidlands (http://hackthemidlands.com/), which is a 24 hour hackathon open to anybody - students, non-students, professionals, newcomers and under 18s, amongst others, are invited to learn, build and share whilst designing and developing a piece of technology that they will present to other attendees and judges at the end of the 24 hour period. The event has around 200 attendees, and has currently had two iterations, with a third being planned for late September/early October 2018. I delivered a 30-minute presentation at the 2016 BCS Member Groups Convention on the need for hackathons, and their incredible ability to unify and reach into local communities.
Current MAR 2016	President <i>Computer Science Society, University of Birmingham</i> I have been elected president of the departmental society for computer science for three consecutive years (and have only had a small lapse in leadership, when I was writing my bachelors thesis). Over my time working with the society, I have raised over £40,000 worth of sponsorship for its' members, and used this money to reinvest in both them, and initiatives in the local tech community - notably supporting local events through in-kind sponsorship of our state-of-the-art hardware lab that I founded. This allows us to give opportunities to those in the local and wider communities that they may have otherwise never gotten the chance to have. Moreover, I have organised and ran over 60 events for the society and the community, and won a number of awards for its' success.
Current MAR 2016	Lead Organiser/Organiser <i>Women in Technology Conference</i> I have worked with the Women in Technology Conference (see: https://wiseatuob.co.uk/women-in-tech/) since 2016 when the event was in its 2nd iteration. It is a celebration of women working in all fields of STEM, and is co-hosted by CSS, WISE (Women in Science and Engineering), and oSTEM (Out in STEM). We ensure that everyone is welcome at the event, and aim to empower women to aspire to work and strive in the tech industry - even opening up to under 18s to inspire the younger generation to follow in the footsteps of many great women before them, giving them the confidence to pursue their dreams, whatever they may be.
September 2018 JULY 2018	Project Software Developer & Researcher <i>Majestic (Majestic.com)</i> I did some further research work at Majestic, following my previous successful work with them.
Current JUNE 2018	Associate (Researcher & Developer) <i>University of Birmingham</i> I am working with researchers from the School of Chemical Engineering at the university to create an interactive interface for them to display their research into the trends of energy usage and CO2 emissions on campus to the public. This is part of the university's efforts to reduce their carbon footprint by 20% by 2020.

Current APR 2016	<p>Community Engagement Officer & Inclusivity Officer <i>BCS Birmingham Branch</i></p> <p>I work with the BCS Birmingham Branch to help engage and support the local tech community. I've helped to bring in speakers for the monthly talks as well as provide monetary aid to local voluntary events, including AstonHack, BrumHack, BullHacks and HackTheMidlands. After the first HackTheMidlands, I was invited to give a 30-minute keynote at the BCS National Conference in London about the event and hack events in general. This encouraged the BCS to work more to support events across the country. Another part of my role is helping to organise speakers for the monthly branch events that we host.</p>
Current APR 2017	<p>Events Working Group Lead & Ambassador Working Group Lead <i>Silicon Canal</i></p> <p>I volunteer as the events working group lead, and the ambassadors working group lead for Silicon Canal, a group aiming to create a more cohesive and welcoming tech community in Birmingham. Following my medium post on the state of the Birmingham tech community in April 2017 (https://medium.com/@TauOmicronMu/progressing-the-birmingham-tech-community-46d62509969a), I was invited to work with Silicon Canal as a thought leader to help steer their thinking and suggest ways of further engaging with the community and breaking down silos between different groups that currently coexist in it. Moreover, I'm currently working with local companies and vendors to put together an events package to help new events start up and find the necessities such as a venue, catering, and sponsorship both more easily, and at a heavily discounted rate (or free).</p>
Current JULY 2018	<p>Doctoral Researcher <i>University of Birmingham, School of Computer Science</i></p> <p>I am working alongside Professor Peter Tino to carry forward the successful work from my bachelors thesis, furthering my work in the field of signal processing with respect to acoustic music, and tackling the currently unsolved problem of musical pitch detection. Given that the UK makes billions of pounds each year from its' music industry, this research has the potential to have a significant impact overall.</p>
Current OCTOBER 2018	<p>Student Groups Executive (SGX) <i>University of Birmingham Guild of Students</i></p> <p>I am one of five elected Student Groups Executives, and work with the other SGXes and some of the full-time officer team who form the SGX committee to work on recognition/derecognition of student groups, grant approval, etc.</p>
Current SEPTEMBER 2018	<p>Guild of Graduates & Alumni Association (GGAA) Committee Member <i>University of Birmingham</i></p> <p>Following my graduation from the university in June 2018, I ran for election to the GGAA, who work closely with the Development and Alumni Relations Office (DARO) to engage the Alumni of the university in events and initiatives that help them to give back - especially to current students. As well as this, I'm involved in the processions at graduation ceremonies, formally welcoming the new graduates into the alumni community.</p>
Current NOV 2017	<p>Freelance Community Consultant/Developer Evangelist <i>Colonel Duck Productions et al.</i></p> <p>I have done work in the Birmingham tech community as a consultant for companies who want to get more involved, and support the community more. In particular, I was consulted by Colonel Duck Productions, who went on to do work with a number of university societies, and are looking to expand their horizons and do work supporting local events and initiatives in tech in the future.</p>
Current APR 2017	<p>Organiser <i>College of Engineering and Physical Science (EPS) Awards</i></p> <p>I am one of the organisers for the EPS awards, an annual event that takes place to celebrate the work of the 29 societies within the college at the University of Birmingham, and the incredible work that the students do year in, year out. This involves logistical planning, sponsorship, advertisement, and a plethora of other related roles.</p>

Current Nov 2017	<p>Freelance Networking/Encoding Engineer <i>ESL UK et al.</i></p> <p>I have experience working as a freelance network/encoding engineer, having worked with ESL UK on the Clash Royale World Championships Finals at the Copperbox Arena at the Queen Elizabeth Olympic park in 2017. My role included initial network and encoding equipment setup, as well as working as part of a team that ensured that the stream was going out in 9 different languages to over 250,000 concurrent viewers.</p>
Current DEC 2016	<p>Freelance Tournament Manager/Admin <i>Multiplay, ESL UK et al.</i></p> <p>I've worked as a tournament manager/admin at a number of professional events and organisations. My experience lies mainly with League of Legends, but I'm able to turn my hand to most tournaments if required.</p>
Sep 2016 - MAR 2018	<p>Undergraduate Demonstrator <i>University of Birmingham</i></p> <p>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. This involved teaching and/or mentoring content to students who are often completely new to the concepts, helping them to understand, and further, to learn them. I am also responsible for working alongside other demonstrators to ensure that help is provided quickly and efficiently.</p>
Current SEP 2016	<p>Clarifai Champion <i>Clarifai</i></p> <p>I'm one of the second batch of Clarifai champions, which is their initiative to shape upcoming developer evangelists. See more here: http://blog.clarifai.com/introducing-the-clarifai-champions/V9v37zW7Dqj and here: http://blog.clarifai.com/introducing-the-clarifai-champions/V9v37zW7Dqj</p>
Current JAN 2017	<p>Ambassador/Developer Evangelist <i>Algolia</i></p> <p>I was chosen as an ambassador for Algolia (see: https://www.algolia.com/), and help them to engage with and help the local and wider tech community in Birmingham, and the UK as a whole.</p>
Jul 2017 - SEP 2017	<p>Software Developer <i>Vanti</i></p> <p>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. I 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, and also 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.</p>
Jun 2017 - AUG 2017	<p>Freelance Software Developer <i>Millennium Point</i></p> <p>I worked in a team with Millennium Point to design and develop a piece of data visualisation software that connected guests at an event based on their interests. The software was called LINC - more info can be found at: http://www.lincgraph.co/</p>
Dec 2016 - DEC 2016	<p>Developer/Analyst <i>Majestic (Majestic.com)</i></p>

Following successful past work at Majestic, 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. I independently worked to unify SEO metrics to create a single metric that accurately represented the data sets that the company has; devised and documented an efficient method (single mathematical expression) to calculate the shortest distance from an arbitrary point to an arbitrary continuous function; the final metric is to be used to impact almost the entire client-base, and is already being used by the internal analytics team, and presented the final result to the executive board and ensuring that a full handover of all work was conducted.

Jul 2016 -
SEP 2016

Software Developer
Majestic (Majestic.com)

A 10-week placement at Majestic, developing innovative ways to represent and interpret their data. Mainly working on frontend & UX, but doing some backend too. Predominantly JavaScript. See: <http://labs.majestic.com/>

Jul 2014 -
SEP 2014

Project Lead
JaGeX Games Studio

I was contracted by JaGeX to work on a project that had been left dormant for just over a year. My role involved creating, implementing and testing innovative and efficient solutions to many issues within the project itself, and to effectively communicate with my team.

Jul 2015 -
NOV 2015

Development Team Lead
RuneTime

I volunteered as the development team leader of a small site. My role involved managing a team of developers to ensure that a high-quality website was created, providing professional guidance to the team members, ensuring that each member performed their duties punctually and to a high standard, and liaising with the owner.

Nov 2014 -
MAR 2016

Webmaster
Stafford Constitutional Club

I did some work for the Stafford Constitutional Club maintaining their web domain, website etc., and ensuring that everything was kept up to date and in order.

EDUCATION

JULY 2018 Bachelor of Science in COMPUTER SCIENCE, **University of Birmingham**, UK
First-Class with Honours

Thesis: "Real-Time Polyphonic Pitch Detection on Acoustic Musical Signals" | Advisor: Dr Ian BATTEN

PUBLICATIONS

GOODMAN & BATTEN, 2018 Real-Time Polyphonic Pitch Detection on Acoustic Musical Signals,
18th IEEE Symposium on Signal Processing & Information Technology

SCHOLARSHIPS, AWARDS, AND ACCOLADES

SEP 2018	Fellow of the Burgon Society (FBS)
SEP 2018	Fellow of the Royal Society of Arts (FRSA)
JUL 2018	Member of the Royal Institution (MRi)
JUN 2018	Winner (1st Place) - University of Birmingham BEAR Cluster Challenge 2018
MAY 2018	School of Computer Science PhD Scholarship - University of Birmingham
JUN 2018	Outstanding Event Award (HackTheMidlands) - EPS Awards 2017
JUN 2018	Society of the Year 2017/18 (CSS) - EPS Awards 2017
JUN 2018	Industrial Award (shortlisted) - EPS Awards 2017
JUN 2018	Inspirational Committee Member (shortlisted) - EPS Awards 2017
JUN 2018	Volunteer of the Year (shortlisted) - EPS Awards 2017
JUN 2018	The Great Achievement in EPS Award (shortlisted) - EPS Awards 2017
JAN 2017	Associate Member (AMBCS) - British Computer Society
OCT 2016	Winner - Hackference 2016
FEB 2016	Ramsay Computer Science Bursary - University of Birmingham
DEC 2015	2nd Place - HackTheHolidays - MLH Fall Season 2015
OCT 2015	1st Place - AstonHack - MLH Fall Season 2015

NEGOTIATED SPONSORSHIPS/PARTNERSHIPS

The total value of the negotiated sponsorships below is **£70,710.48**

HackTheMidlands

HTM 3.0	BT - Silver Sponsorship
HTM 3.0	Bentley Motors - Bronze Sponsorship
HTM 3.0	Capgemini - Silver Sponsorship
HTM 3.0	Robert Walters - Silver Sponsorship
HTM 3.0	Unity - Silver Sponsorship
HTM 3.0	Nexmo - Silver Sponsorship
HTM 3.0	Lloyds Banking Group - Bronze Sponsorship
HTM 3.0	GitHub - Partnership
HTM 3.0	Millennium Point - Venue Sponsorship
HTM 3.0	British Computer Society - Gold Sponsorship
HTM 3.0	Majestic - Silver Sponsorship
HTM 3.0	Kainos - Bronze Sponsorship
HTM 3.0	CSS - Bronze Sponsorship
HTM 3.0	University of Birmingham School of Computer Science - Digital Sponsorship
HTM 2.0	Millennium Point - Venue Sponsorship
HTM 2.0	British Computer Society - Gold Sponsorship
HTM 2.0	Transport for West Midlands/WMCA - Gold Sponsorship
HTM 2.0	Majestic - Silver Sponsorship
HTM 2.0	eLife - Silver Sponsorship
HTM 2.0	Vanti - Silver Sponsorship
HTM 2.0	Nexmo - Silver Sponsorship
HTM 2.0	Algolia - Silver Sponsorship
HTM 2.0	CSS - Bronze Sponsorship
HTM 2.0	Samsung Internet - Digital Sponsorship
HTM 2.0	University of Birmingham School of Computer Science - Digital Sponsorship
HTM 2.0	IBM - Partnership
HTM 2.0	Discord - Partnership
HTM 2.0	JetBrains - Partnership
HTM 2.0	Trello - Partnership
HTM 2.0	The Medic App - Partnership

HTM 2.0 Cycle - Partnership
HTM 1.0 Millennium Point - Venue Sponsorship
HTM 1.0 BCS - Gold Sponsorship
HTM 1.0 Majestic - Silver Sponsorship
HTM 1.0 Codio - Silver Sponsorship
HTM 1.0 ACSS - Bronze Sponsorship
HTM 1.0 CSS - Bronze Sponsorship
HTM 1.0 School of Code - Bronze Sponsorship
HTM 1.0 Boston Tea Party - Food Sponsorship
HTM 1.0 BCS (Student Chapter) - Breakfast Sponsorship
HTM 1.0 University of Birmingham School of Computer Science - Digital Sponsorship
HTM 1.0 CompTIA - Monetary Partnership
HTM 1.0 HackCampus - Partnership
HTM 1.0 Clarifai - Partnership
HTM 1.0 StickerMule - Partnership
HTM 1.0 Vanti - Partnership

Computer Science Society, University of Birmingham

2018/19 Kainos - Silver Sponsorship
2018/19 Argos - Gold Sponsorship
2017/18 EY - Silver Sponsorship
2017/18 College of Engineering and Physical Sciences - Monetary Award
2017/18 In-Kind Sponsorship - Hardware Lab @ HackTheMidlands 2.0
2016/17 In-Kind Sponsorship - Hardware Lab @ HackTheMidlands
2016/17 In-Kind Sponsorship - Hardware Lab @ BrumHack 6.0
2016/17 University of Birmingham School of Computer Science - Hardware Lab Grant
2016/17 Accenture - Silver Sponsorship
2016/17 Deutsche Bank - Silver Sponsorship

BCS Birmingham Branch

2016/17 Women in Technology Conference 3.0 - Silver Sponsorship
2016/17 BrumHack 7.0 - Silver Sponsorship
2016/17 BullHacks 1.0 - Silver Sponsorship

PUBLIC SPEAKING

2018 HackTheMidlands 3.0 - Host
2018 CSS EGM - Host
2018 CSS Welcome Evening - Making the most of your time at university
2018 School of Computer Science - CSS Freshers' Welcome Speech
2018 CSS AGM - Speech
2018 Hack24 3.0 - Presentation
2017 AstonHack 2017 - Presentation
2017 GCSE Lesson - Norvig Spellchecker
2017 VIth form Lesson - Computer Science at University
2017 HackNotts 2017 - Presentation
2017 Hackference 2017 - Presentation
2017 CSS EGM - Speech
2017 HackTheMidlands 2.0 - Host
2017 School of Computer Science - CSS Freshers' Welcome Speech
2017 BrumHack 6.0 - Sponsor

2017 CSS AGM - Speech
2017 MLH Prime: Europe Regionals - Presentation
2017 CSS Ball - Speech
2017 BullHacks 1.0 - Sponsor
2017 Hack24 2.0 - Presentation
2017 OxfordHack - Presentation
2017 HackCambridge - Presentation
2016 HackTheHolidays 2016 - Presentation
2016 CSS Christmas Meal 2016 - Speech
2016 BCS Role-Based Convention Nov. 2016 - Keynote
2016 AstonHack 2016 -Presentation
2016 HackNotts 2016 - Presentation
2016 Women in Technology Conference 2.0 - Host
2016 BrumHack 5.0 - Presentation
2016 CSS EGM - Speech
2016 Hackference 2016 - Presentation
2016 HackTheMidlands - Host
2016 School of Computer Science - CSS Freshers' Welcome Speech
2016 CSS AGM - Speech
2016 BrumHack 4.0 - Presentation
2016 IC Hack '16 - Presentation
2015 Peer Mentor for OCaml, University of Birmingham
2015 HackTheHolidays 2015 - Presentation
2015 GreatUniHack 2015 - Presentation
2015 HackNotts 2015 - Presentation
2015 AstonHack 2015 - Presentation