Matthew Consterdine

M.Eng. Computer Scientist

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§ Summary

 Bath-based, enthusiastic, team focused computer scientist who is aiming to design novel technology

Skills

- Creative writer and communicator, with solid mathematical background
- Know data structures and algorithms
- Experienced using functional and object-oriented / MVC programming
- Written ARM microcontroller ASM
- Proficient with Docker, Puppet, SSH, Linux and microservices sysadmin
- Designed and evolved databases
- Use Eclipse IDE, L^AT_EX, Microsoft Office, Photoshop, and Sublime Text
- Employ Agile methodology and Git

E Languages

- 1. Java, JavaScript, Perl5, PHP8, SQL
- 2. C, C++, C#, Excel, HTML5, RegExp
- 3. Bash, SCSS, Python3, Rust, Scheme
- 4. Go, MATLAB, OCaml, VB.NET Core

Projects

- · Run Jekyll-powered blog, consto.uk
- Uploaded and sold 3D Unity games on itch.io, thousands of downloads
- Developed an open-source OpenCL GPU-accelerated fractal explorer
- Built a D3.js BTC blockchain tracer

Interests

- Keen photographer who delights in exploring the world, wild swimming, cycling, and running half marathons
- Thrice entered Southampton Game Jam and competed in ACM ICPC
- D&D, tabletop games, video games

9 Awards

- Bloomberg CodeCon finalist, 2018
- BT Cyber Security CTF winner, 2017
- Zepler Scholarship Scheme, 2014
- Full Clean UK Driving License, 2013
- Bronze Duke of Edinburgh, 2012
- A References available on request

Experience

Netcraft, Computer Scientist, 2018–present

- Created Angular JS, Mojolicious / Perl5, and PHP8 anti-phishing tools
- Focused on optimising performance, reliability, and Amazon AWS cost
- Documented issues, reviewed colleague's edits, ran CI / CD pipelines
- ► Helped develop Netcraft Go and phishing kit recruitment challenges
- Trained and improved Keras / VW machine learning website classifiers
- Completed ad hoc research on Netcraft's big databases, using MySQL
- > Safely vulnerability tested clients systems, producing formal reports
- Analysed obfuscated PHP phishing kits, identifying credential stores
- ▶ Edited and published articles for Netcraft's Hugo-powered websites

Meetup, Local Group Organiser, 2020–present

Organised and led in-person / Zoom events for thousand-strong group

BathTub Orchestra, Flautist and Editor, 2019–present

Performed in and recorded concerts, uploaded to Facebook / YouTube

♦ Winchester Innovation, Web Dev. Intern, summer 2017

- ▶ Achieved a remote web dev. internship in React and Python3 APIs
- Updated full-stack Raspberry Pi applications, automated deployment
- Used GStreamer to power web-based Internet-of-Things microscope
- ▶ Reinforced communication, documentation, and time management

Previous Experience

- ▶ Blue Diamond, summer 2016: Handled sales, delivery, and assembly
- ▶ Bulldog Technology, 2012–2013: Sold computers, assisted repairs
- ▶ Sue Ryder, 2010: Volunteered for local charity shop, served customers

Education

◆ University of Southampton, Computer Science, 2014–2018

- ▶ Studied M.Eng. Computer Science, 68% average, a top 2:1 degree
- **1st Year. Algorithmics**, Computer Systems, Data Management, Foundations of Computer Science, GUIs, Modelling, Testing / TDD
- **2nd Year.** Computer Hardware, **Distributed Systems**, Intelligent Systems, Interaction Design, PL Concepts, Software Engineering
- **3rd Year. Cyber Security**, Dissertation, Engineering Management and Law, Game Design, Machine Learning / AI, Secure Systems
- **4th Year.** Automated Code Gen, **Computational Finance**, Cryptography, Group Dissertation, Intelligent Agents, Open Data, Web Architecture
- **Dissertations.** Lect.Me: A Real-Time eLearning Platform, and OneM2M: Simulating a Multi-Vendor Internet-of-Things
- Active member of Board Game, Folk Music, and Quidditch societies

Sixth Form College, 2012–2014

- ▶ A* Electronics, A Maths, A Physics, B Fine Art (AS), C Chemistry
- Prototyped and playtested C++ SFML games in Game Dev. club

Secondary School, 2007–2012

A* Computing, A* Maths, A* Biology, A* Chemistry, A* Physics, A Art, A Geography, A Statistics, B English Lang., B English Lit., C Spanish