


# Matthew Consterdine

M.Eng. Computer Scientist

consto.uk 

mattconsto  

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Available on request 

## 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<sup>A</sup>T<sub>E</sub>X, Microsoft Office, Photoshop, and Sublime Text
- ◆ Employ Agile methodology and Git

## 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 3D Unity games to itch.io, thousands of views and 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

## Awards

- ◆ Bloomberg CodeCon finalist, 2018
- ◆ BT Cyber Security CTF winner, 2017
- ◆ The Zepler Scholarship, 2014
- ◆ Full Clean UK Driving License, 2013
- ◆ Bronze Duke of Edinburgh, 2012

 References available on request

## Experience

### ◆ Netcraft, Computer Scientist, 2018–present

- ▶ Created AngularJS, 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 Go and phishing kit Netcraft recruitment challenges
- ▶ Trained and improved Keras / VW machine learning website classifiers
- ▶ Performed 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 Events Organiser, 2020–present

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

### ◆ BathTub Orchestra, Flautist and Editor, 2019–present

- ▶ First flautist, filmed concerts, edited, uploaded to Facebook / YouTube

### ◆ Winchester Innovation, Web Dev. Intern, summer 2017

- ▶ Completed 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: Assisted with sales, delivery, assembly
- ▶ Bulldog Technology, 2012–2013: Resolved problems, Apple repairs
- ▶ Sue Ryder, 2010: Volunteered for local charity shop, served customers

## Education

### ◆ University of Southampton, Computer Science, 2014–2018

- ▶ Achieved 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 e-Learning 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