

MAX WILLIAMS

address: 6 Mandeville Drive, Surbiton, Surrey, KT6 5DT

email: me@maxwillia.ms

GitHub: github.com/maxwilliams94

website: maxwillia.ms

mobile: +447887392845

EDUCATION

2016-2017 **University of Warwick, MSc Diamond Science & Technology, 1st Class Honours**

2012-2016 **University of Bristol, MSci Chemical Physics, 1st Class Honours**

2010-2012 **Esher College, Esher**
A-levels: Maths (A*) Chemistry (A) Physics (A)

2008-2010 **Hinchley Wood Secondary School, Hinchley Wood**
GCSEs: 5 A*, 6 A, 1 B

EMPLOYMENT HISTORY

- 2017-present **Postgraduate Researcher, School of Chemistry, University of Bristol, UK**
Kinetic Monte Carlo modelling of diamond growth by chemical vapour deposition
- Serial code written in Fortran (2008), version controlled in git and utilising CMake.
 - Data analysis, data processing and input generation using Python 3.
 - Fortran and python knowledge self-taught within self-motivating, self-managed environment.
 - Translation of experimental and theoretical concepts into software for modelling
- Summer 2019 **Junior Developer Intern, Interactive Scientific, Bristol**
- Prepared/converted molecular simulations for VR education tool
 - Contributed to existing tools in AGILE-like environment
 - Outreach with local school children, demonstrating the education tools
- 2018-present **Computational Physics Demonstrator, School of Physics, University of Bristol, UK**
- Assist with conceptualisation of physics concepts for numerical simulation.
 - Give assistance and troubleshoot student python code during drop-in sessions.
 - Mark and give feedback on submitted code and formal write-ups.
- 2013/14 **Volunteering Matters, Heritage Camp Leader**
- Week-long volunteering summer camp for 16-25 year-olds involving cleaning and conservation of churches and cathedrals.
 - Responsible for planning and day-to-day running of the camp through liaison with parents, the charity and the venue staff, determining work groups and organising social activities after the working day.
 - Flexible leadership style to promote teamwork, enjoyment and inclusion while maximising productivity and minimising conflict.

2012-2018 **Tutor, GCSE Maths**

- Punctuality, professionalism and lesson structuring to ensure confidence in value for money for parents and effective learning for students.
- Time management, organisation and planning to ensure lessons run smoothly with focus on relevant areas.

OTHER DEVELOPMENT EXPERIENCE

Fortran **Fortran Open MPI Wrapper Library**

Modern software development practices, git workflows, build systems, open mpi

Full Stack **Online submission/processing system for IMPRESSION, ML NMR shift prediction**

Flask, google-cloud, docker, databases, web security

C Basic knowledge of C

SKILLS

Driving Full, clean, driving licence

INTERESTS

Ultimate Frisbee

Playing Ultimate Frisbee competitively with the University of Bristol and City of Bristol teams, representing them at national competitions. I was elected 'Tournament Director' for the 2017/2018 academic year, responsible for planning, organising and running tournaments for the club

Running

Marathon training 3-times weekly

Chess

Watching professional games, self-study, playing online