

# NICHOLAS COURTMAN

+447792890088

[nicholas@courtman.me.uk](mailto:nicholas@courtman.me.uk)

<https://www.courtman.me.uk>

Having spent much of my life experiencing the great outdoors through sailing, hiking and other activities I am enthusiastic about engaging more in the natural environment, particularly marine and meteorological environments. My Masters in Physics provides me with a good grasp of mathematical and physical principles, along with experience of research, experimentation, presentation, and problem solving. Developing software for work, at university, and for pleasure has given me experience in a variety of coding and database languages, and server and computer systems. My interest in music has given me experience in team work, leadership and responsibility, while helping me to become a highly motivated individual.

## EDUCATION

- **PGCE** PGCE with QTS - University of Buckingham, 2016-07-17
- **Undergraduate Masters** MPhys(2.1) - University of York, 2013-07-17
- **A-Level** Maths(A), Further Maths(B), & Physics(A) - Bishop's Stortford College, 2009-07-17

## TRAINING

Latest qualifications only are listed below:

- **Future Leaders Programme** *Civil Service Local* 2019-09-01
- **Administering Red Hat Linux - Part 3** *StayAhead* 2019-02-14
- **Certified Kubernetes Administrator (CKA)** *NobleProg* 2021-07-07
- **Systems Operations on AWS** *Global Knowledge* 2019-10-02

## EMPLOYMENT AND EXPERIENCE

- **Geospatial Data Engineer (Remote)** (UK Hydrographic Office) 2021-12-13 to present: Designed, built, and supported automated pipelines using deep learning, distributed computing and serverless architectures
- **DevOps Infrastructure Engineer** (HM Land Registry) 2017-11-06 to 2021-12-03: Used infrastructure tooling such as Puppet, AWS, OpenShift and RedHat Linux to manage internal and public services
- **Physics Teacher** (Queenswood) 2014-08-01 to 2017-07-31: Taught Physics at KS3, GCSE and A-level. Ran a coding club and helped with the DofE Award

- **Optical Coatings Technician** (Thin Metal Films Ltd) 2014-01-27 to 2014-07-31: Operated vacuum-chambers to apply high-specification coatings to a variety of substrates
- **Vacation Student** (AECOM) 2012-09-04 to 2012-09-28: Modelled residential and commercial developments with particular regard to the environmental service infrastructure
- **Minster Host** (York Minster) 2010-10-02 to 2012-04-30: Work within a public-facing team to ensure visitors had an enjoyable visit

## IT

- **Coding:** Used Python and Bash scripting at work to automate a variety of processes including a system to check the health of applications running on virtual machines, and a system to automate Helm deployments (all unit tested). Learning C for microelectronics and cli utils
- **Databases:** Administered PostgreSQL databases at work, managed migrations using Alembic, used managed access controls and backups
- **Web-Development:** Worked with developers to debug Python-Flask and Java-SpringBoot applications. Developed Flask applications in my own time
- **Linux:** Managed CentOS systems at work, spinning up VMs on local datacentres and AWS. Worked with Debian systems at home
- **Containers:** Built and managed Kubernetes clusters. Administered OpenShift systems and automated deployments using Helm
- **Automation:** Automated builds on AWS with Terraform, provisioned virtual machines with Puppet, and orchestrated containers with Helm

## MUSIC

- **Responsible:** Manage and provide music for services at St Petroc's Church, Harford by liaising with Vicars and Readers. Coordinate and provide music for Taize services with Churches Together in Ivybridge
- **Qualifications:** Achieved Grade 8 organ (distinction), Grade 6 piano, Grade 5 viola and theory
- **Ensembles:** Essex Young Person's Orchestra; University of York Concert Orchestra; University of York Choral Society; quartets at school and university
- **Teaching and leadership:** Taught piano for two years; led choirs at church before and during university; founded and conducted a small choir at university; played the organ for services since before university

## OUTDOORS

- **Hiking:** Completed bronze, silver and gold Duke of Edinburgh award, and have completed many hikes and expeditions since: required knowledge of navigation, basic health and safety precautions, a good level of organisation, and enthusiasm
- **First Aid:** Completed first response training and basic outdoor first aid
- **Sailing and Kayaking:** Completed Day Skipper, VHF Certificate and 2\* Kayaking qualifications and sailed throughout my childhood: required knowledge of marine environment, chart-based navigation, basic weather prediction, and use of specialised equipment

## COMMUNICATION, ORGANISATION, AND LEADERSHIP

- **Communication:** Taught Physics to students from Y7 to U6th; communicated complicated concepts with the general public at Physics outreach events; listened as a Youth Pastoral Worker before going to university
- **Organisation:** Worked to tight deadlines in Thin Metal Films Ltd and Queenswood School; founded, ran, and served on university society committees; organised concerts in retirement homes whilst at school
- **Leadership:** Founded and ran two societies at university; helped lead 1st Bishop's Stortford Boy's Brigade; led a team for a children's summer camp