ROSS WARREN

EDUCATION

LDUCATION	
DPhil (PhD) in Physics University of Oxford, UK	2020
Masters (MRes) in Plastic Electronics - Distinction Imperial College London, UK	2016
MSci (Hons) in Physics - First Class Imperial College London, UK	2013



RESEARCH EXPERIENCE AND SKILLS

Postdoctoral Research Associate in Physics

Jenny Nelson Group, Imperial College London, UK

- March 2020 present
- Python: Kinetic Monte Carlo and tight-binding simulations using numpy, scipy and cython.
- Writing: journal articles of successful results obtained during my PhD.

Visiting Researcher in Chemical Engineering

Oct. 2019 - Jan 2020

Hitosugi Group, Tokyo Institute of Technology, Japan

Graduate Researcher in Physics

2016 - 2020

Advanced Functional Materials and Devices Lab, University of Oxford, UK

- Expertise: in molecular doping, organic solar cells, organic transistors and electrical measurements.
- Python: modelling, data analysis, data visualisation and software for experimentation.
- Presentations: to research groups and at large international conferences.
- Teaching: tutor in analogue electronics. Senior demonstrator for the undergraduate electronics lab.
- Mentoring: undergraduate project developing software for performing lab experiments remotely.

Undergraduate Research Assistant in Materials

2011 - 2012

Ecole Polytechnique Fédérale de Lausanne, Switzerland

EXPERIENCE IN INDUSTRY

Marine Field Geophysicist

2013 - 2015

Schlumberger, Canada and United States

- Data analysis: of large, noisy datasets. Signal processing techniques to improve signal-to-noise ratio.
- Bash: scripting to automate data analysis routines. My code got rolled out across several vessels.
- Team work: within a diverse geophysics group, presenting to and communicating with clients.

AWARDS

International Exchange Scholarship	2019
Plastic Electronics Symposium Poster Award	2018
Hackathon Win - African Healthcare, Google Campus London	2017

SELECTED PUBLICATIONS

Warren R. et al. Controlling energy levels and Fermi level en route to fully tailored energetics in organic semiconductors Nature Communications 10, 5538 (2019)

Warren R. et al. Tuning the ambipolar behaviour of organic field effect transistors via band engineering. AIP Advances 9, 035202 (2019)