

THOMAS HOLLIS



Student at The University of Manchester
BEng Electrical & Electronic Engineering



Dual French/British Nationality



Full driving licence



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(Available upon request)



github.com/PsiPhiTheta



Education

The University of Manchester

Bachelor's Degree (BEng Hons), Electrical & Electronic Engineering, 2015-2018 (GPA: 84%, top 10%)
Best modules: Digital Systems Design II (96%), Mathematics (93%), C programming (88%)

Hockerill Anglo-European College

International Baccalaureate, 2015 (Result: 39/45)

Subjects: HL: French (7) Physics (6) Maths (5), SL: English (7) Chemistry (6) Business (6) +2EE/TOK

Lycée Français Charles De Gaulle

French AS Level, 2013 (Result: A), GCSEs, 2013 (Result: 5 A*, 4 A)



Work Experience

Software Engineer at ComClever (August 2017 - September 2017)

Developed a machine learning solution for predicting optimal stock levels within the PrediStock project. The AI developed was a 3 layer, feedforward neural network with prediction correlation of 0.87.

Electronic Engineer at MBDA (June 2016, 2017 – August 2016, 2017)

Lead the summer placement team into missile electronics. Details are confidential and bound by the UK Government Official Secrets Act (1989) and a non-disclosure agreement with MBDA and the MoD.

Laboratory Researcher at Institut Jacques Monod/CNRS & University Paris Diderot (February 2014)

Independent research in hydrodynamics of Taylor Couettes, data collection and scientific computing.

Laboratory Assistant at Imperial College London (April 2012)

Carried out 1st year university practicals on pH buffer action and presented on Personalised Medicine.



Publications

Fardin, M.A., Hollis, T. et. al. (2014) 'Flow instabilities in large amplitude oscillatory shear: A cautionary tale', *Rheologica Acta*, 53(12), pp. 885–898. doi: 10.1007/s00397-014-0818-7.



Languages & Software

English (Native – IRL level 5), **French** (Native – IRL level 5), **Spanish** (Professional – IRL level 3)

Programming C, Assembly, VHDL, R, LabVIEW, MATLAB, Simulink, UNIX/Bash, Windows/Batch, BASIC, HTML, Python, WikiMarkup, LaTeX, Java.

Software Electrical (Altium, Visio, Zuken, MultiSIM, MPLABX, IPSA+), Acoustics (WinISD, Traktor S4, Virtual DJ, FL Studio, Audacity, Ableton), 3D CAD (SolidWorks, Google SketchUp), Office Applications



Independent Projects

HFCrypto	Innovative deep-learning cryptocurrency trading algorithm (in development, in Python)
RainCrypto	Cryptocurrency ticker for Windows 10 desktop environment (developed, in Rainmeter)
Altfolio	Trading portfolio of nine alt-coin cryptocurrencies (developed, exchanges via Poloniex)
ESP-18	Line following robot embedded system, using PID control (built & developed, in C)
uClk	Alarm clock embedded system with automatic light and heat detection (developed, in C)
CloudLight	RF controlled smart-light (built, used by award-winning film director Florent Agostini)

Exam Results

1st Year (71%)

C Programming	88%
Electromagnetic Fields	78%
Microcontroller Engineering	76%
Measurements & Analytical Software	75%
Mathematics 1E2	75%
Mathematics 1E1	72%
Digital System Design	73%
Electronic Materials	69%
Circuit Analysis	69%
Energy Transport and Conversion	62%
Electronic Circuit Design	56%
Electronics Project	53%

2nd Year (84%)

Digital Systems Design II	96%
Mathematics 2E1	93%
Control Systems I	88%
Electronic Circuit Design II	87%
Signals and Systems	85%
Embedded Systems Project	85%
Microcontroller Engineering II	83%
Machines Drives & Power Electronics	83%
Generation & Transport of Electr. Energy	78%
Sustainable Commercial Development	78%
Analogue and Digital Communication	72%

Online Courses

[MIT] Circuits and Electronics (6.002x)
[MIT] Exploring Black Holes (8.224x)
[MIT] Computer Systems Security (6.858x)
[Melbourne] Discrete Optimization (EcYeW)
[Princeton] Bitcoin & Cryptocurrency (bpKpq)

[ANU] The Violent Universe (ANU-ASTRO3x)
[Caltech] The Evolving Universe (Ay1001x)
[Caltech] Cryo-EM (ccp4bb)
[Columbia] MOS Transistors (ELEN E6302x)
[Stanford] Machine Learning (zVvo7)

Certifications

Engineering Leadership Scholarship
National Instruments
UK National Security Clearance (SC)
Security Vetting (Defence Business Services)
Hackathon Participant
Google (2016, 2017), MLH (2017)
Grade 7 Piano
Trinity College London
Powerboat Level 2
Royal Yachting Association
VHF Licence
Royal Yachting Association

International Certificate of Competence (ICC)
Royal Yachting Association
Sailing Level 3 (Catamaran, Windsurf, Funboat)
Fédération Française de Voile (FFV)
Duke of Edinburgh (Bronze)
The Duke of Edinburgh's Award
First Class Cadet
Royal Air Forces Association
Regional Standard Competitive Swimmer
The Amateur Swimming Association
Young Writers Creativity Award
Young Writers Anthology

Voluntary Work

Contributor at Gridcoin Research
2016 - Present
Co-founder & Script Doctor for Similar Mind
July 2016 - Present
Editor/Contributor at Wikipedia
May 2016 - Present

Event organiser for Gure Esku Dago
June 2015
75+ hours of volunteering at The IB
September 2013 - August 2015 (2 years)
Private tutor for The DofE & Bananamole
2012 - 2015 (3 years)