## THOMAS HOLLIS



Dual French/British Nationality

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github.com/PsiPhiTheta



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# **Education**

#### The University of Manchester (2015-2018)

Manchester, UK

Bachelor's Degree (BEng Hons), Electrical & Electronic Engineering, (GPA: 84%, top 10%) Best modules: Digital Systems Design II (96%), Mathematics (93%), C programming (88%) Bachelor Thesis: Deep Learning Algorithms Applied to Blockchain-Based Financial Time Series

### Hockerill Anglo-European College (2013-2015)

Stortford, UK

International Baccalaureate, (Result: 39/45)

HL - French (7) Physics (6) Maths (5); SL - English (7) Chemistry (6) Business (6); EE/TOK (+2)

## Lycée Français Charles De Gaulle (2008-2013)

London, UK

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

### Independent Online Courses (MOOC)

[Stanford] Machine Learning (Coursera) [Princeton] Bitcoin & Cryptocurrency (Coursera) [Melbourne] Discrete Optimization (Coursera) [MIT] Computer System Security (MIT OCW)

## Work Experience

#### Software Engineer Intern at ComClever (Fall 2017)

Lille, France

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 a prediction correlation of roughly 0.87.

#### Electronic Engineer Intern at Airbus, MBDA (Summer 2016, Summer 2017)

Stevenage, UK

Lead the summer placement team in missile electronics. Designed a comprehensive solution to power distribution architecture issues of defence systems. Details bound by the UK's Official Secrets Act (1989).

#### Laboratory Researcher at Institut J. Monod/CNRS & University Paris Diderot (Spring 2014)

Paris, France

Team research in surfactant dynamics of Taylor Couette systems, data collection and scientific computing.

#### 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 – ILR level 5), French (Native – ILR level 5), Spanish (Professional – ILR level 3), Italian (ILR level 1)

**Programming** C, C++, Assembly, R, MATLAB, Simulink, Python, UNIX/Bash (Proficient) Windows/Batch, VHDL, LabVIEW, HTML, BASIC, LaTeX, Java (Conversational)

## Select Projects

HFCrypto
Innovative deep-learning trading algorithm for cryptocurrencies (in progress, Python/TensorFlow)
RainCrypto
Multi-cryptocurrency ticker system for Windows desktop environments (developed, in Rainmeter)
Altfolio
Trading portfolio of top 10 high-potential blockchain altcoin technologies (developed, via Poloniex)
ESP-18
Line following robot embedded system using autonomous PID controller (built & developed, in C)
uClk
Alarm clock embedded system with automatic light and temperature recognition (developed, in C)
CloudLight
RF controlled smart-light cinematography prop (built, used in award-winning film by Flo Agostini)

### Y Certifications & Awards

BCG Mentorship Competition Winner (top 5%)

Boston Consulting Group

**Hackathon Participant** 

Google (2016, 2017, 2018), MLH (2017)

**UK National Security Clearance (SC)** 

Security Vetting (Defence Business Services, MoD)

NI Engineering Leadership Scholarship

National Instruments

First Class Army Cadet

Royal Air Force

Certified Engineering Technician (EngTech)

Institution of Engineering and Technology (IET)