# THOMAS HOLLIS



Dual French/British Nationality

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github.com/PsiPhiTheta



#### 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 Gaule (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)