

# THOMAS HOLLIS



Dual French/British Nationality

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[github.com/PsiPhiTheta](https://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 Forex Time Series Modelling

**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)

[Melbourne] Discrete Optimization (Coursera)

[Princeton] Bitcoin & Cryptocurrency (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 MBDA** (Summer 2016, Summer 2017)

Stevenage, UK

Lead the summer placement team in missile electronics design. Details are confidential and bound by the

UK Government Official Secrets Act (1989) and various NDA with MBDA and the Ministry of Defence.

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

Paris, France

Independent research on surfactant dynamics in Taylor Couettes, data collection and scientific computing.

**Laboratory Assistant at Imperial College London** (Spring 2012)

London, UK

1<sup>st</sup> year university laboratory practicals on pH buffer action, research and analysis in 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 – 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 cryptocurrency markets (in development, in Python)

**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)

*Interests: Blockchain, Machine Learning, Data Science, Consciousness, Skydiving, Baroque Piano*