## THOMAS HOLLIS



Dual French/British Nationality



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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%)

Bachelor Thesis: Deep Learning Algorithms applied to Forex Time Series Modelling

# 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 Gaule

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

#### **Independent Online Courses (MOOC)**

[Stanford] Machine Learning (Coursera) [Princeton] Bitcoin & Cryptocurrency (Coursera)

[Melbourne] Discrete Optimization (Coursera) [MIT] Computer Systems Security (MIT OCW)

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

# Select Projects

Innovative deep-learning cryptocurrency trading algorithm (in development, in Python) **HFCrypto** RainCrypto Cryptocurrency ticker for Windows 10 desktop environment (developed, in Rainmeter) Altfolio Trading portfolio of ten 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)



# Certifications & Awards

#### **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)