# Yousef Amar

# Curriculum Vitae

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# Profile

As an MEng graduate in Computer Systems Engineering with Business Management, my skills are multi-faceted. With strengths in hardware design, low to high-level programming, and every layer of web development, but also project management and business administration, I am a jack of all trades.

I am currently a PhD student at QMUL with a focus on Personal Data, Human-Data Interaction, Privacy, and Networks under Dr Hamed Haddadi at the Department of Electronic Engineering and Computer Science.

For more information and to see past projects and work in more detail, please visit my website or my LinkedIn profile.

# Education

2016-present PhD in Electronic Enginering and Computer Science, Queen Mary University of London, London, U.K.

2010-2014 Master of Engineering, The University of Birmingham, Birmingham, U.K.

First Class Honours

#### **Project Work:**

4th Year MEng Final Year Project

Design and implementation of a low-cost UAV sensor system for constructing object and topographical 3D models in real-time.

3<sup>rd</sup> Year MEng Group Project

Building a quadcopter that can autonomously transport a payload from the roof of the EECE building to an arbitrary target.

- ♦ Electronic, Electrical & Computer Engineering Society
- ♦ Birmingham Enterprise and Entrepreneur's Society (BEES)
- ♦ Games Development Society
- ♦ Investment Society

#### Other relevant modules:

- ♦ Data Mining
- ♦ Computer Vision
- ♦ Computer Networking
- ♦ Computer Hardware and Digital Design
- Digital Systems and Embedded Computing
- ♦ Digital Logic and Microprocessor Systems
- ♦ Object Oriented Software Design
- Computer Systems, Algorithms and Data Structures
- ♦ C Programming and Algorithmic Problem Solving
- Project Management and Professional Practice
- Advanced Interactive 3D Design for Virtual Environments and Serious Games

2010 European Baccalaureate, European School Frankfurt, Frankfurt, Germany

# Experience

#### Research

Oct 2014 - Research Intern, The University of Oxford, Oxford, U.K.

Jan 2016 Research in multi-camera rig calibration, multimodal scene reconstruction, machine learning, and HRI, while attending doctoral training program lectures

#### Vocational

Sept 2010 - Programming Tutor, Self-employed, Birmingham, U.K.

June 2014 Personal tutor to 16 students

Nov 2011 **Teacher Assistant**, *The University of Birmingham*, Birmingham, U.K.

Teaching and supervision of sixth form students

May – Sept **Shop Floor Worker**, Aquila Aviation AG, Berlin, Germany

2008 Construction and assembly of fibre composite plane parts

#### Miscellaneous

- ♦ Student Representative of the Department of Electronic, Electrical and Computer Engineering for 2 consecutive years. Student Rep Chair for 1 year.
- ♦ Peer Assisted Study Sessions (PASS) Leader; tutoring first year students.
- Ambassador for the University of Birmingham on a cultural exchange program in China for future direct-entry students.
- ♦ EECE Green Impact project assistant for 2 years and sole student delegate.
- ♦ Certification of completion of Birmingham Start-Up Masterclasses 2013

#### Skills

Italian (4yrs)

 $C^{\sharp}$ C++ HTML5+CSS3+JS Python C Programming/ Java Scripting PHP+SQL VHDL GLSL MatLab CUPL Assembly Bash OpenGL OpenCV OpenCL OpenMP **CUDA** SSE Programming Software and **APIs** MS Office (incl. Visio) **MTFX** Doxygen Node.js LiveScript MongoDB Cordova WebGL WebSocket Unity3D Blender Git, Hg, SVN **GIMP** IBM z/OS mainframe (CICS, WebSphere MQ, JCL) English (fluent) German (fluent) Arabic (fluent) Spoken

Mandarin (1yr)

Language

- Other  $\diamond$  Extensive experience in teamwork with people from any background face-to-face or online and achieved the PSA Advanced award through volunteering work and attending regular lectures, workshops, and networking events for soft skills and insights on the industrial environment.
  - Ability to perform extended research and write up detailed scientific reports as well as literary essays, due to the nature of my degree and my participation in the annual European School Science Symposium several times.
  - Onfidence in public speaking and dealing with large numbers of people thanks to participating in multiple public speaking events, presented projects in front of hundreds for evaluation, and actively campaigning for a position as school council president, but also by acting as the major protagonists in 3 Shakespearean plays out of 4 starred in.
  - Ability to work efficiently under heavy time pressure as is evident through amassing a large fanbase writing video game mods and extensions who expect updates for all software to be released mere days after major official game updates in conjunction with winning several programming contests (e.g. IBM, SMAC) with tight deadlines.

# Publications

2015 Incremental dense multi-modal 3d scene reconstruction. *In Intelligent Robots and Systems (IROS), 2015 IEEE/RSJ International Conference on* (pp. 908-915). IEEE.

#### **Awards**

- 2014 AP Jarvis Prize
- 2014 Personal Skills Award (Advanced)
- 2014 Peer Assisted Study Sessions scheme PASS Leader of the Year award
- 2014 University of Birmingham Student Mobile App Competition (SMAC) winner
- 2013 IBM Mainframe Challenge 2012 winner
- 2009-2013 University of Birmingham First Class Excellence Scholarship

#### Referees

#### Dr Hamed Haddadi

Lecturer (Assistant Professor) in Digital Media

Department of Electronic Engineering and Computer Science,

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#### Professor Philip H. S. Torr

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Royal Society Wolfson Merit Award Holder
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## Professor Robert J. Stone

Chair in Interactive Multimedia Systems

Director, Human Interface Technologies Team

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### Dr Costas Constantinou

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#### Dr Michael Spann

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Further available upon request.