

Harry Edward Howarth

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Personal Profile

An ambitious Computer Science 3rd year undergraduate with a mathematical, scientific and programming background, strong interpersonal and the ability to communicate clearly. A hardworking asset to any team able to take up all roles including team leader, as demonstrated in multiple team based situations from working in Agile software teams during a Year in Industry with a world leading engineering multinational, to University projects to sports teams.

Education

- MComp Computer Science with Employment Experience
 - University of Sheffield **2014-2019** (Four academic + one industrial year)
 - 1st achieved in 2nd year of study
 - 1st expected overall
 - Year in Industry with MBDA working as a Engineer in the Software Mission Planning and Control department.
 - To see a complete module list for my first three years of study please visit my Linkedin - <https://www.linkedin.com/in/harry-howarth-8bb78ab3/>
 - Dissertation - 'Sound Event Detection for Smart Cars'. Machine Learning, Artificial Intelligence & Machine Listening task.
- A Levels - Royal Grammar School **2012-2014**
 - Maths (A) , Economics (A) & Chemistry (B)
- GCSE - Royal Grammar School **2007-2012**
 - A* - Maths, Physics, Chemistry, English Literature, Geography, History
 - A - Economics, Biology, English. B - French.
- Google Taught Udacity Course - Developing Android Apps
 - The source code for my app can be found at - <https://github.com/HarryEH/Udacity-APP-SquadManager>

Work Experience

- MBDA, Bristol (Filton) - Undergraduate Software Engineer - **2016-17**
 - MBDA is a multinational defence company owned by BAE Systems, Airbus Group and Leonardo S.p.A.
 - Worked, as the only Software Engineer, an R&D program creating a Mission Planning and Control system with rapid planning algorithms for the (UK and French) Ministry of Defence sponsored MCM-ITP conference in October 2017. (<http://www.mcmitp.com/events/>)
 - Became a key focal point for knowledge on a new technology developed in the department - a **Service Oriented Architecture** framework that is going to be the future of Mission Planning products.
 - Led the uptake of developing with the SOA framework in the early stages of SPEAR 3 (<http://www.mbd-systems.com/product/spear/>) Mission Planning Software development as part of a multidisciplinary team.
 - Acted as a STEM Ambassador going into schools to promote engineering and was involved in the running of a glider building competition at the Fleet Air Arm Museum in Yeovil.
 - Reference available on request.

- Thomas Walling Primary Academy - Volunteer **2012 - 2013**
 - Working either alongside the teacher or on a one-to-one basis with the Year 4 pupils, I helped the students to develop their skills in English and Mathematics. This improved my communication with staff and pupils alike and increased my confidence in my own ability to work with other people.

Skills & Abilities

- Programming Languages
 - Java, Matlab, C++, C#, Ruby, Python, Haskell and Javascript
 - Web Development - used the Ruby on Rails framework and used HTML, Haml, CSS and Sass alongside Javascript.
 - Android app development, using Java & XML.
- Frameworks and Testing
 - Ruby on Rails, JUnit, RSpec and .NET, Service Oriented Architecture Frameworks(design & implementation), Cucumber automated behaviour testing and testing code is developed to coding standards eg. MISRA.
- Tools
 - Matlab (including Simulink, Polyspace & Real Time Workshop), Eclipse, IntelliJ suite, Visual Studio, Xcode & Android Studio.
- Operating Systems
 - Linux (Ubuntu & Red Hat Enterprise), OS X & Windows (including office)
- Agile Software Development
 - Extreme Programming (XP) - university group project experience
 - SCRUM - experienced in an engineering team at a world leading firm

Projects

(see <https://www.github.com/harryeh> for more)

- Degree Classification App (Android) - *Java & XML*
 - Made for students to simplify the calculation of their grades and degree classification. Currently on the Google Play Store - <https://play.google.com/store/apps/details?id=com.harryehowarth.grademydegree>
 - See Github for source code
- Website for a History Organisation - *Ruby on Rails*
 - Prize winners in this full stack web development university group project for a real client. We were hired, after the module, by the client to release the website - <http://www.villagememories.org.uk>
 - See Github for source code
- Optical Character Recognition - *Python 2.7*
 - Data preprocessing, feature extraction, classifier design and efficient learning.
 - Source Code - <https://github.com/HarryEH/OCR-Python-Assignment>

Other

- Interests: Avid cricketer (offspinner, LH bat); Football season ticket holder; Walking.
- Clean UK Driving License since June 2013.
- High level UK Government Security Clearance