

Objective

Third year undergraduate student at the University of Glasgow with 1 year of professional experience in software engineering. Experienced in a variety of languages and technology stacks.
Seeking an internship placement for the summer of 2016.

Education

- **University of Glasgow** Glasgow, UK
Master of Science in Computer Science (Expected First) Sep. 2013 - 2018
 - Studied Maths and Comp Sci in Second Year, and Maths, Physics, and Comp Sci in First Year.
 - Strong A grades in all Computer Science classes, and many Mathematics classes.
 - First Prize at Glasgow Uni Tech Society Hackathon 2015 (see projects)
- **Trinity Academy** Edinburgh, UK
Secondary School 2007 - 2013

Sixth Year: Adv. Higher Computing (A), Adv. Higher Mathematics (A), Adv. Higher Physics (B)

Fifth Year: Higher Computing (A), Higher Mathematics (A), Higher Physics (A), Higher Chemistry (A), Higher Modern Studies (B)

Work Experience

- **TBR Global Chauffeuring** Glasgow, UK
Software Developer (Part-Time) September 2015 - Present
 - Working on automated processing system for customer's itineraries using C#.
- **TBR Global Chauffeuring** Glasgow, UK
Software Developer Intern Jun 2015 - Sep 2015
 - Created a toolset to improve how easily customer information could be obtained from Emirates Airline. Toolset consisted of a reader to obtain XML files from an FTP server in Dubai, the reader had to be robust and reliable so that data could be relied upon.
 - The next step was a parser to extract the flight manifests from the Passenger Name Records (PNR) stored in an XML file. This also validated all addresses using external services (OpenAddressesUK, Google Maps) and marked any suspicious data with warnings.
 - The final step was a management web app that allowed multiple users to simultaneously inspect, manipulate, and import the data into the TBR Global main system using a REST API.
 - Played a major role in creating a microsite for Visa call-centers to use to quickly create new international jobs in the TBR Global system. Worked as part of a team of 5 to complete the project in a very tight deadline.
 - Also created a tool to validate all timezone information stored in the TBR Global database using Google Maps Timezone API.
 - Heavily used C#, MVC 5, EntityFramework, SQL, JavaScript, jQuery, and Bootstrap.
- **Chi Squared Innovations** Remote
Software Developer (Part-Time) Sep 2014 - Jun 2015
 - Worked closely with CEO to recreate the public facing website in-house using the Python/Django webstack.
 - Used D3.js, a JavaScript data visualisation library to create several dynamic graphs.

Projects

- **GUTS Hackathon 2015** <https://github.com/Sheepzez/yorkhill-kinect>
Kinect game for Yorkhill Children's Hospital *Oct 2015*
 - Winner of first prize overall, and Morgan Stanley's challenge at Glasgow University Tech Society (GUTS) Hackathon.
 - Game using Windows XNA in which players can work together to scrub a hospital of germs. Controlled by MS Kinect 2.0.
 - Utilises C# Tasks for parallel processing of Kinect's multiple data streams.
 - Created in 3 days with a team of three.
- **Google Maps API .NET** <https://github.com/ericnewton76/gmaps-api-net>
Google Maps API C# Library *Jun 2015 - Present*
 - Major contributor to open source class library.
 - Personally implemented Places API, and TimeZone API in the library.
 - Help manage tickets created by users, and decide how issues are tackled.
- **Grub Grabber** <https://github.com/Sheepzez/GrubGrabber>
Web app to help my friends decide where to go for lunch *Jan 2015 - Mar 2015*
 - Allows users to register and blacklist or favourite locations, so that the search algorithm provides more tailored results. Also uses how many times a location was 'liked' to influence suggestions.
 - Uses unit tests to prevent regressions.
 - Developed as part of University course.
 - Utilises Python/Django webstack, ORM database, Google Maps JS API, and jQuery.
 - <http://grubgrabber.pythonanywhere.com/>
- **The Matrixonator** <https://github.com/Sheepzez/Matrixonator-Java>
JavaFX application for manipulating matrices *Dec 2014 - Mar 2015*
 - Originally a Python project, this open source Java port proved to be much more powerful
 - Allows users to manipulate matrices via a GUI.
 - Handles basic operations such as addition, subtraction, and multiplication - as well as more complex ones such as eigenvalue and reduced row-echelon form (RREF) calculation.
 - Can identify shortcuts for calculations, such as eigenvalue calculation for matrices in RREF.
 - Has extensive unit tests, and utilises a continuous integration server to test commits and pull requests.
- **Other Projects**
 - Also attended other hackathons including GUTS Hackathon 2014 (Glasgow Uni), and STACS Hack 2015 (St Andrews Uni).
 - Have attended several talks at Glasgow University on the tech industry, and interesting problems industry faces.

Skills

Languages: C#, Java, Python, JavaScript, SQL, C

Technologies: HTML5, CSS3, Bootstrap, Foundation, Django, jQuery, EntityFramework 6, IIS, C# LINQ

Tools: Visual Studio 2013/2015, SQL Server Management Studio, Eclipse, Git, SVN, Mercurial

Operating Systems: Windows, Linux (Debian, Fedora)

Miscellaneous: Exceptional troubleshooting and debugging skills. Able to quickly grasp interactions in large projects. Strong algorithmic skills.