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Education	JUN 2019 SEP 2016	<b>B.Sc. Computer Science, First-Class Honours with Cum Laude Award</b> — <i>University of Birmingham</i> Graduated <b>first-class honours</b> with a final grade of <b>86.18</b> (student rank <b>no. 2 out of 113</b> ), with Cum Laude award. Equivalent GPA: <b>4.25</b>
Experience	PRESENT SEP 2019	<b>Graduate Software Engineer</b> — <i>Arm, Manchester</i> (ongoing) Currently working at Arm as a graduate software engineer on the compilers team after receiving a return offer from my internship in 2018. Extensive involvement in the development of the Arm HPC compiler toolchain (based on LLVM for general compiler infrastructure, and clang/flang for the C/C++/Fortran frontends) and surrounding infrastructure.
	OCT 2018 JUN 2018	<b>Software Engineering Intern</b> — <i>Arm, Manchester</i> (4 months experience) Worked as a software engineering intern at Arm on the HPC compilers team for ~4 months. Extensive work with build systems, compilers, and continuous integration.
	APR 2018 SEP 2017	<b>Computer Science Teaching Associate</b> — <i>University of Birmingham</i> (8 months experience) Teaching CS undergraduates robotics and Java programming through tutorials and demonstration sessions. Involved one-to-one tutoring as well as teaching small cohorts of students.
Skills	Languages	<b>Proficient</b> — Java, Python, C/C++, Haskell, Bash <b>Familiar</b> — SQL, Groovy, OCaml, MIPS assembly <b>Working Knowledge</b> — MATLAB  <b>Web</b> — HTML, CSS, Javascript, Bootstrap
	Technologies	<b>Tools</b> — Ansible, Clang, Conan, Docker, GCC/G++, LLVM <b>Continuous Integration/Deployment</b> — Artifactory, GoCD, Jenkins <b>Libraries/Platforms</b> — Flask, leJOS, NLTK, PyCrypto, Swing/AWT, TFLearn, Wordpress <b>Revision Control</b> — Git, Subversion <b>Linux/UNIX</b> — Scripting, software configuration, system administration, and maintenance
Awards		Winner of the School of Computer Science Cum Laude award, recognising exceptional academic achievement throughout my degree. This award is presented to students in the top 10% of their cohort.  Winner of University of Birmingham's <i>Best Computer Science Student</i> award for 2017 (first year). Winner of University of Birmingham's <i>Best Computer Science Student</i> award for 2018 (second year).  2017 winner of the <i>Tazmmal Husein Memorial Award</i> for student excellence in computing. This is awarded to the best computer science student out of Birmingham's top 3 universities.
	Projects	<b>Personal Blog</b> — Keep a technical blog discussing and explaining topics in computer science at <a href="http://www.joechrisellis.com/blog">www.joechrisellis.com/blog</a> .  <b>Open Source Contributions</b> — Contributed to the conan package manager by both submitting pull requests and reporting issues.  <b>Third Year Final Project</b> — Developed a user-friendly, compiled functional programming language, affectionately named Funky. The project delivered a compiler for converting source files written in Funky to other target languages and a REPL allowing the user to evaluate Funky code interactively. Key features include static typing, lazy evaluation, pattern matching, and multiple code generators.  <b>Second Year Team Project (MOOD)</b> — Successfully developed a three-dimensional first-person shooter game using a raycaster graphics engine titled 'MOOD' alongside a team of five other students. The game has an old school look-and-feel, bearing stylistic resemblance to the early 1990s hits of the genre such as Quake, DOOM, and in particular, Wolfenstein 3D. The game took 11 weeks to complete.  <b>First Year Robotics Project</b> — Successfully developed an autonomous warehouse using 3 Lego NXT robots programmed with the Java leJOS library. Robots were tasked with simultaneously picking and packing virtual stock in a physical enclosure representing a warehouse. Elected as manager for a team of 7 programmers. Personal accomplishments include team leadership alongside successful implementation of the Bluetooth network stack, motion control system, and route execution algorithm. Produced an elegant, functional system which achieved full marks.  <b>Class Allocation Project</b> — Developed software for a local school which computes a near-optimal class allocation using genetic algorithms and related machine learning techniques. The software parses student preferences to obtain a description of the year group's social dynamic. A genetic algorithm is applied to this description to find an allocation of students to classes that maximises overall happiness. The software saves 7 hours of staff time per term and consists of a Java client-side application and a Python server.  More projects are available at <a href="http://www.github.com/joechrisellis">www.github.com/joechrisellis</a> .