

Calum Gilchrist  
8 Namayo Avenue,  
Laurieston,  
Falkirk,  
Stirlingshire,  
FK2 9LX

Dear Ms Neivetha Thiruchelvam,

I am writing to apply for the advertised position of **Software Engineer** at your startup, Rails Drive.

Although Rails Drive is a new company, I can imagine that you are passionate about developing inspiring web applications and providing great service to your customers.

Ruby on Rails enamoured me from the moment I first used it and it constantly surprises me in the innovative approaches that it takes. The role of Software Engineer at your company would not only help me hone my skills with RoR, but apply what I've learned from developing my own RoR applications with an innovative and creative company.

Software Engineering is the art of applying development principles to all aspects of software production. Ensuring that at all stages best practices are used and that the future development of the software is as simple and painless as possible. I have worked in several 2-3 man teams, for university assignments and for 2D/3D games in time restricted competitions. I have used the git version control system in all of my collaborative projects and managed tasks between participants in agile methods, such as Scrum.

As a university student I am always researching new technologies and approaches to software development. In my courses I have learned a lot about measuring the performance and fitness of algorithms and other code quality measurements and procedures, such as Unit Testing. Discussing technology and software is one of my passions and I am always enthused to discuss my interests and what I am working on with other people.

As well as software development, I have always been interested in Linux System Administration. In my spare time I manage a collection of Debian and Arch Linux based servers for web hosting, primarily for my own website. Building and configuring servers is another aspect of the this role that I could fulfill, as working development services and deployment strategies greatly benefit group workflow.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Calum Gilchrist', written in a cursive style.

Calum Gilchrist

# Calum Gilchrist

8 Namayo Avenue,  
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Stirlingshire, FK2 9LX

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## Education

BSc Computer Science at Heriot Watt University, Edinburgh, 2014.

Received two Certificates of Merit. Currently on track to receive a first class degree.

Three courses of note:

### **Database Management Systems (DBMS)**

Design and implementation of a database for farmers to keep track of their livestock and income. Entity Relationship diagrams were used to design the table layout and MySQL was used as the DBMS.

### **Interaction Design**

Created and designed a web application prototype as a group for tracking a students courses and grades. The practical aspect of the course required a pitch for the product as well as user testing, with appropriate surveys taken during the testing stage.

### **Data Structures and Algorithms (DSA)**

DSA was an introduction to a variety of searching and sorting algorithms, such as Quicksort and Binary Search and how they can be compared. This involved deriving the complexity of different algorithms and actually implementing some of the algorithms in coursework.

**Advanced Highers:** Physics [B], Mathematics [B]

**Highers:** Computer Science [A], Technological Studies [A], Chemistry [A], English [B]

## Skills Profile

Developed a small photo gallery in Ruby on Rails for a personal photography portfolio.

Developed a HTML5 web game in CoffeeScript for a 48 hour game competition.

Managed a three man team in the creation of a 3D First Person Shooter for the 7 Day First Person Shooter competition.

Operatead, designed and maintained small blogging sites using Wordpress and Drupal Content Management Systems.

Always interested in using new technologies and techniques. Try to implement at least one unfamiliar principle in all personal projects and activities.

Worked as an events photographer at film festivals, live performance and charity concerts.

## Technical Skills

Maintain a collection of Debian and Arch Linux servers for personal web hosting and other services.

Configuration of Apache and nginx web servers.

Maintain MySQL servers for development and self hosting of web applications.

Experience with Unit Testing, primarily JUnit.

Application development with C, C++, Java and Python programming languages.

Develop

Worked on several small games using OpenGL, JMonkey, LibGDX and other game libraries.

Worked in a two man team to develop a Java game in 72 hours for the 22nd Ludum Dare competition.

Used the git *version control system* in collaborative projects and in all personal projects in the past few years.

Familiar with web standards such as HTML5, CSS3 and JS through development of personal websites and projects.

Developed a lightbox for a photo gallery using the JQuery library.

Produced static websites for a small events company and for a local event.

## Additional Information

Attend monthly meetings of Edinburgh Tech Meetup.

Member of Falkirk Linux User Group for 3 years.

Delivered a talk on Open Source Photography Software at the Falkirk Linux User Group.

Interested in Amateur Digital Photography.

Use of Adobe Photoshop for image editing and web design.

Developed and photographed all the headshots used in the Graeme High School 2010 Year Book.

Assisted in setting up and running live video for a small Battle of the Bands.

Last updated: November 30, 2012