

# Simon Turner

**Github:** <https://github.com/nocturnaltortoise>

**Email:** simonturner34@gmail.com

I am a Computer Science student at the University of Sheffield. I have practical experience in software engineering in teams, working with clients to solve real world problems using a variety of technologies. I am willing to learn and use any programming language or technology stack.

## Projects

- **Village Memories website** (Ruby on Rails, SASS, JavaScript, Haml, SQLite, PostgreSQL, Rspec, Rake, Capybara)
  - Working with a client and a team of developers, we developed a site to allow the public to upload recordings, photos and other material documenting their memories of three villages in South Yorkshire. We also designed a moderation system, so that the client's group could curate the archive, and work with members of the public to get more information and more material.
- **Instant Messaging Client** (NodeJS, Express, SCSS, Grunt, JavaScript, Jasmine, MongoDB, Mongoose):
  - Web app built with two other developers in NodeJS using Express with a MongoDB (and Mongoose) backend. Allowed you to chat with individuals or groups, sending and editing messages, including inline LaTeX support for sending formulae.
- **Sinatra Twitter App** (Ruby, Sinatra, CSS, JavaScript, SQLite, Bootstrap, Twitter API, Rake, Rspec, Capybara, Cucumber, Agile development):
  - Ruby and Sinatra app built to work with a client's Twitter account, allowing them to do basic (following, unfollowing, tweeting, deleting tweets etc) and more advanced functionality (automatically following users related to those they already followed, or types of users they wanted to follow) from a dashboard. Worked with a team of developers, using Agile (Scrum), tested with RSpec, Capybara and Cucumber.
- **Where They Fell** (Bradford Hackathon project site, using HTML5, CSS, JQuery, Python and the Wikipedia API):
  - A website made for a hackathon with two teammates. Used the Wikipedia API and data scraped from a website to work out in which battle soldiers died during the First World War.
- **Natural Deduction assistant** (JavaScript, HTML5, CSS, Jasmine):
  - A tool for applying natural deduction rules on propositional logic formulae, to help with learning and performing natural deduction proofs. Built in JavaScript and tested in Jasmine.
- **Optical Character Recogniser** (Python, NumPy, SciPy):
  - A Python program for recognising letters on scanned pages of a book, including error

correction to improve accuracy. Using a k-nearest-neighbour classifier, and principal component analysis for feature reduction.

- **Sora's Fall: Game Jam 2015** (Python, PyGame, XML):
  - A game written with a team of other developers and an artist, in Python using PyGame, with XML for the game's levels.

## Skills

- **Languages:** JavaScript, JQuery, Java, Ruby, Haskell, Python, HTML5, CSS, SCSS, SASS.
- **Tools, Frameworks and Libraries:** Git, Ruby on Rails, Sinatra, Grunt, Rake, Jasmine, Bootstrap, Capybara, Rspec, Cucumber, NumPy, SciPy, Express, Bash, Zsh, Fish.
- **Database software:** MongoDB, SQLite, MySQL
- **Operating Systems:** Windows, Linux (both Redhat and Debian based)
- **Software Development:** Agile, Test Driven Development, Scrum, eXtreme Programming, Waterfall

## Education and Training

- Reading Computer Science (BSc, 3 Years, currently 2<sup>nd</sup> year) at the University of Sheffield, achieving a First Class level of performance in my first year. Graduating in July 2017.
- Achieved A Levels in Maths (B), History (A), an AS Level in Physics (C), and a BTEC (level 3) in IT (Distinction Star).
- Achieved GCSEs in: ICT (A\*), Graphic and Product Design (A), Physics (A), Maths (A), English Language (A), English Literature (A), Religious Education (A), History (A\*), Geography (A\*), Chemistry (A\*), Biology (A)

## Relevant Experience

### **Webmaster for Sheffield University Roleplaying Society:** April 2015 – Present

I designed a website based on requirements from society members, and developed that website with HTML5, CSS3, and Wordpress to make content easily editable for the future. Taught me important lessons in working with non-technical people, requirements capture, and maintaining a live website.

### **Interests and Hobbies**

Although I enjoy programming side projects in my spare time, I have other hobbies. I enjoy playing video games, but also enjoy more traditional types of games – board and tabletop roleplaying games particularly. I have recently been learning French, and British Sign Language, as I find learning new languages and ways to communicate very interesting. Not all of my hobbies involve staying indoors either – I enjoy going hiking, especially in the Peak District, but also on the coastal paths of Cornwall back home.