

Niall Beard

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I'm looking for developer roles for short-term [4-18 week] engagements that are fully remote.

Pragmatic and creative; I have a strong theoretical background in Computer Science and a keen drive to implement useful, usable, and innovative websites. I have 12 years experience as an agile software engineer, both as a dev and as a tech lead; working with start-up sized teams and large corporations. My expertise is Ruby on Rails, but have experience in numerous languages and technologies

WORK EXPERIENCE

Ruby Engineer @ [MTVH](#) - March 2021 - October 2022

MTVH has a Ruby on Rails application used for thousands of residents to communicate with the company and make payments. I was a key member of the team in developing functionality, and in leading the design, implementation, deployment, and review of several new features.

I lead the implementation of features to massively improve our contact channels (see [write up](#)), and to provide novel techniques for account recovery.

I participated in the implementation of several other features such as: merging two websites into a single web interface whilst continuing to access user data from disparate RDS' and postgres databases, improvements to the Stripe payment system, and integrating PCI compliant KeyIVR payments.

I also mentored our junior developers providing regular advice, guidance, and paired-programming support.

Software Engineer @ Createk [Company closed] - June 2020 - March 2021

At Createk I joined a team working with **React** developing additional functionality for a large commercial website. I also provided support developing features for a **ruby on rail** application. I left on good terms when the company was acquired.

Senior Research Software Engineer – October 2016 – January 2020

Scientific Web Technologist – March 2013 – October 2016

@ [University of Manchester eScience lab](#)

My extensive time with the eScience Lab saw me progress from developer to project lead. As *Senior Research Software Engineer* my primary responsibility was the delivery of ELIXIR-TeSS (<https://tess.elixir-europe.org>). TeSS is a flagship Ruby on Rails project developed on behalf of the Life Science Research Infrastructure - ELIXIR. The project aim was to improve the findability of training resources for the European Life-science community by aggregating disparate training opportunities' metadata into a centralized, feature-rich portal. I worked on this project as the lead developer for the first 2 years and as the project manager for the remainder of my time in post.

The portal is developed using the Ruby on Rails framework and makes extensive use of many open-source Rubygems. To best create a UX-considered front-end we made use of ERB, Javascript/jQuery, Bootstrap, Handlebars and Markdown renderers. To facilitate search, we decided to implement a search engine using Sunspot SOLR. To enhance the service, we created numerous integrations with 3rd party web services - such as Google Maps API, BioPortal Ontology API, various data services, and an AAI integration. To open up our curated data back to the community in the most interoperable and usable way; we followed industrial best-practices and implemented a JSON-API

specification, Swagger docs, CSV exports, and embeddable JavaScript widgets. To create automatic data imports; we developed a library of Ruby scripts which scrape target websites nightly and write new or modified results to the TeSS API. We published as Rubygems any components that were generic enough to be re-utilized by other developers. In order to create performance optimizations we used Redis and Sidekiq to queue data processing activities and minimize the load for web services.

The majority of the design and technology decisions were made by me and based on gathered user-requirements and analysis of available technologies. I frequently engaged with stakeholders to ensure the software met the needs of a diverse, changing community of scientists by hosting workshops and attending conferences regularly.

I oversaw the entire software life-cycle and ensured robust deployment practices were adhered to including code-review, [CI testing](#), and [documentation](#). I was responsible for scheduling, assigning, and reviewing the work of a team of developers distributed across Europe with varying and unpredictable availability. I was also responsible for handling [pull requests](#) from a community of voluntary Open Source contributors. In order to fully engage with this community, I represented TeSS globally at over fifty international conferences, workshops, and hackathons. Some of my presentations are available to view on [slideshare.net](#), and some of my academic posters are available on [f1000](#).

I have co-authored [several academic papers](#), and I am the lead author on two papers (one pending review). In addition to these responsibilities I also supervised Masters, 3rd-year, and Summer Vacation students undertaking projects involving TeSS. I have taught introductory programming workshops through [The Carpentries](#) foundation and I am a [qualified Carpentries Instructor](#).

EDUCATION

M.Eng (Hons) 2:1, Computer Science - September 2009 - June 2013.

@ University of Manchester

- Studies focused on machine learning and data mining techniques
- Student staff consultation committee member
- Accenture short film competition winner
- PricewaterhouseCooper Teamwork Award Runner up

A-Levels, June 2006 – June 2008

@ Winstanley College

A2: Philosophy: A, Maths: A, Computing: B

AS: Politics: A, Further Maths: B

AWARDS & QUALIFICATIONS

Software Carpentry Instructor, 2017

1st Prize at Hackathon;

Collaborations Workshop 2019

WEB PORTFOLIO

tess.elixir-europe.org

mtvh.online

PERSONAL INTERESTS

I enjoy making fun, innovative web applications such as:

- reelr.net - a tinder-style interface for finding a critic with the same film tastes as you
- pretentious-o-meter.co.uk - a website that calculates how pretentious a film is
- stayk.co.uk - an online sweepstake organizer

I have volunteered to teach beginner coding courses for which I prepared fun, collaborative [Git training exercises](#) based on the game *Rock, Paper, Scissors*.

Outside of that, my interests are nature photography, cycling, swimming, travel, scuba diving, board games, history, culture & philosophy, and learning Spanish.

REFERENCES - Available on Request