

## Brice Fernandes

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I am a talented and versatile engineer with a broad range of technical expertise, as well as entrepreneurial and leadership experience. I am looking for an engaging technical leadership or problem solving role that will leverage my broad experience and let me contribute to a culture of technical excellence and growth.

<b>Contact Information</b>	416 City Road Sheffield S2 1GD UK	<i>e-mail:</i> brice@fractallambda.com <i>website:</i> <a href="http://fractallambda.com">fractallambda.com</a> <i>twitter:</i> <a href="https://twitter.com/fractallambda">@fractallambda</a> <i>mobile:</i> 07548312227
<b>Languages</b>	English, French (Native proficiency) Spanish (Basic reading & listening comprehension)	
<b>Education</b>	<b>The University Of Sheffield</b> <b>BSc. Physics with Computer Science</b>	2006 - 2010
<b>Technical Skills</b>	<p><b>PROGRAMMING:</b> Functional Programming, Python, Javascript (ES6, React, Redux, NodeJS, Babel), Scheme, Clojure, Jython, Java (OpenGL in Processing, GUI), Shell scripting (Bash), DVCS (Git, Mercurial), C, F#, C#, Go, Unit Testing, Regular Expressions, Test Driven Development, RDF, Agile Methodologies (Scrum, Kanban, Pair Programming ...), Lean Software Development</p> <p><b>ADMINISTRATION:</b> Kubernetes, Docker, Prometheus, Grafana, Unix (GNU/Linux) administration, Apache, NGinx, Lighttpd, LAMP maintenance and administration, Virtualisation experience with VirtualBox and VMWare.</p> <p><b>APPLICATIONS:</b> Common productivity packages on Windows, OSX and Linux, T<sub>E</sub>X, L<sup>A</sup>T<sub>E</sub>X, and B<sub>I</sub>B<sub>T</sub>E<sub>X</sub>, Vim, Eclipse, 2D/3D CAD/Drafting (Solid Edge)</p> <p><b>OTHER:</b> GitOps, AWS (S3, EB, IAM, EC2, CloudFront, Route53 ...), Game Development, Unity3D game engine, Firebase, Natural language processing (NLTK), WxWidgets (Python), Numpy and Matplotlib (MATLAB equivalent), Python Imaging Library, Glib, GTK, Imagemagick, jQuery, SNMP, Analog and digital electronics: Basic filters, Digital Logic. HTML5, CSS, Less/Sass.</p>	
<b>Talks &amp; Presentations</b>	<b>Using and Abusing Ruby For Computer Science Great Good</b> <a href="#">Code</a> and <a href="#">slides</a> (PDF) available.	March 2016
	<b>Building Objects With Functions</b> <a href="#">An interactive version</a> as well as <a href="#">a recording</a> are available.	June 2015
	<b>Getting Started With DataScript and Reagent</b> Slides are <a href="#">available online</a> .	November 2014
<b>Relevant Experience</b>	<p><b>Senior Customer Engineer at Weaveworks</b> September 2018 - Current</p> <p>Joined the Customer Experience (CX) team at Weaveworks to work directly with our customers and deliver on complex software engagements, carrying out both development and technical project leadership for some of our most high profile clients, including in regulated industries. I improved the formal security incident response process and became a trusted administrator for key internal systems. I defined the onboarding curriculum for new engineers on the customer experience team.</p> <p><b>KEYWORDS:</b> <i>Kubernetes, GitOps, Cloud Native, Prometheus, Terraform, Pulumi, Monitoring, Observability, Customer Experience, Digital transformation, SRE, Training, Recruitment</i></p>	

**Senior Development Engineer at Weaveworks** September 2017 - September 2018  
Joined Weaveworks as a development engineer working on Go tools for managing Kubernetes. I Helped defined the GitOps methodology and communicate it to the developer community. Presented GitOps to conferences in the UK and internationally and delivered training on Kubernetes and GitOps. Member of the on-call engineering team directly responsible for the uptime and maintenance of our online SaaS platform.

KEYWORDS: *Kubernetes, GitOps, Cloud Native, Prometheus, Terraform, Go, On-Call, Incident response, DevOps, SRE, Developer Experience, Training, Recruitment*

**Founder at [Decacoder.com](https://decacoder.com)** October 2015 - January 2017  
Founded an online education company delivering high quality online education to developers via a custom platform. I led the development of a scalable media delivery platform from scratch while also being responsible for all other business areas. I also set up a continuous integration and continuous deployment pipeline using AWS services, and was responsible for the educational design and user experience of all students using the platform.

KEYWORDS: *Product development, Leadership, Javascript, ES6, React, Babel, Firebase, Continuous integration, Continuous deployment, AWS, Gulp, Stripe, Education, UX*

**Startup Mentor & Coach, Accelerate Cambridge** 2013 - 2016  
I was selected to be a founding coach and mentor for the University of Cambridge Judge Business School startup accelerator [Accelerate Cambridge](https://accelerate.cambridge.ac.uk). I delivered a startup founder education curriculum and coached teams on product design, technology strategy, development process, team management, pitching for investment and clear communication. Several of the startups I mentored received prestigious awards, including winning the Duke of York's Pitch@Palace competition.

KEYWORDS: *Startups, Coaching, Business modelling, Pitching, Leadership, Investment, Technology Strategy*

**Instructor & Coach, Ignite Program** July 2015  
I was an instructor and coach for the University of Cambridge Judge Business School Ignite programme. The Ignite programme is a one week course aimed at transform existing early stage enterprises through high quality lectures and challenging workshops. I was responsible for leading workshops during the program, ensuring that each attendee adopted the knowledge shared into their business practice.

KEYWORDS: *Startups, Education, Coaching, Leadership, Event facilitation, Business Modelling*

**Founder, [Cambridge Programmer Study Group](https://cambridgeprogrammerstudygroup.com)** July 2014 - December 2016  
Founded the most active programming meetup in Cambridge, meeting twice a week to study computer science topics. Over two years we studied Machine Learning, Cryptography, Concurrency and Functional programming, amongst other topics.

KEYWORDS: *Machine Learning, Functional Programming, Scheme, SICP, Neural Networks, Cryptography, Concurrency, Computer architecture, Compilers, Interpreters, Community building*

**Instructor, F# developer course** September 2015 - August 2016  
Successfully kickstarted an online tutorial series on the F# programming language. Designed and delivered a curriculum that taught the real world applications the F# language and functional programming, including type-driven design.

KEYWORDS: *F#, Functional Programming, Education, Screencasting, Kickstarter, Video production*

**Instructor, Unity3D Development Course** August 2014 - August 2015  
Successfully kickstarted an online tutorial series on game development using the Unity3D game engine. Designed a curriculum to teach programming for game development in the C# language, including the fundamentals of computer science to a novice audience. The project was delivered over the Udemy.com online platform and reached over 100 000

students. The complete course was accredited for higher education credits and worth 10 European Credit Transfer System credits (~10% of an undergraduate degree).

KEYWORDS: *Education, Unity3D, C#, Game Development, Screencasting, Kickstarter, Video production*

### **Organiser and Facilitator, Startup Weekend**

2013 - 2016

I was an active organiser for the Cambridge Startup Weekend, organising and facilitating several weekend long events aimed at driving the entrepreneurship spirit in the attendees. Several teams from these events went on to form companies, including several still in operation today.

KEYWORDS: *Event facilitation, Community building, Startups*

### **Software Engineer, Cambridge Broadband**

March 2011 - October 2013

Developed and maintained a wide range of software to enable and support a microwave backhaul product at [Cambridge Broadband Ltd](#). Worked on cross platform graphical user applications, embedded C network management using SNMP, internal tools and existing product maintenance. Was also part of a process improvement team that re-designed the software and product development process for the company. Took responsibility for technical recruitment of C developers, drafting requests for quotes and selecting and managing contractors.

KEYWORDS: *C, PPC, Embedded, Python, Linux, GTK, SNMP, Process improvement, Agile, RFQ, Recruitment*

### **Intern, Intelligent Systems Research Laboratory**

Summer 2010

Developed a Flow Based Programming framework to support an anomaly detection subsystem for the [Intelligent Systems Research Laboratory](#) at the University of Reading. Embedded Jython, Groovy, and Javascript programming languages in the Flow Based Programming Framework to enable application developers to work in their language of choice.

KEYWORDS: *Java, Groovy, Jython, Flow Based Programming, Embedded languages, JVM, Distributed computing, Machine Learning, Clustering, Anomaly detection*

## **Awards**

BA Crest Gold Award

Young engineers for Britain Regional Finalists 2005

Best Technical, Startup Weekend Edinburgh August 2012

Winner, Startup Weekend Sheffield July 2013

Winner, Startup Weekend Sheffield July 2014