Brice Fernandes

I am a talented and versatile engineer with a broad range of technical expertise, as well as entrepreneurial and leadership experience. I was instrumental in defining the GitOps methodology. 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.

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Languages

English, French (Native proficiency)

Spanish (Basic reading & listening comprehension)

Education

The University Of Sheffield BSc. Physics with Computer Science

2006 - 2010

Certification

AWS Certified Solutions Architect - Professional Valid to September 2023
AWS Certified DevOps Engineer - Professional Valid to October 2023

Technical Skills

PROGRAMMING: 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, Extreme Programming ...), Lean Software Development.

ADMINISTRATION: Kubernetes, Docker, Prometheus, Grafana, Unix (GNU/Linux) administration, Apache, NGinx, Lighttpd, LAMP maintenance and administration, Virtualisation with VirtualBox and VMWare.

APPLICATIONS: Common productivity packages on Windows, OSX and Linux, T_EX, LaT_EX, and BibT_EX, Vim, Eclipse, 2D/3D CAD/Drafting (Solid Edge, Fusion 360)

OTHER: GitOps, AWS, 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.

Talks & Presentations

Using and Abusing Ruby For Computer Science Great Good Code and slides (PDF) available.

Building Objects With Functions

June 2015

March 2016

An interactive version as well as a recording are available.

Getting Started With DataScript and Reagent

November 2014

Slides are available online.

Relevent Experience

Senior Customer Engineer at Weaveworks

September 2018 - Current

Delivered complex software engagements, carrying out both development and technical project leadership for some of our most high profile clients, including in regulated industries. I was also responsible for training design and delivery for GitOps and Cloud Native training. Worked on all aspects of commercial engagements, from pre-sales to delivery management.

- Defined the GitOps methodology pricinples used by entire company
- Defined criteria for the GitOps consortium's certification programme
- Trusted keyholder for critical internal systems
- Designed and implemented customer engagement playbook
- Designed and delivered public and private Cloud Native training
- Defined the curriculum for new engineers on the customer experience team

KEYWORDS: Delivery management, Kubernetes, GitOps, Cloud Native, Pre-sales engineering, Monitoring, Observability, Customer Experience, Digital transformation, SRE, Training, Recruitment

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, Terrafrom, Go, On-Call, Incident response, DevOps, SRE, Developer Experience, Training, Recruitment

Founder at 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. 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 GroupJuly 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

Sucessfully 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 (\sim 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