Brice Fernandes

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English, French (Native proficiency) Languages

Spanish (Basic reading & listening comprehension)

Education The University Of Sheffield 2006 - 2010

BSc. Physics with Computer Science

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#, Unit Testing, Regular Expressions, Test Driven Development, RDF, Agile Methodologies (Scrum, Kanban, Pair Program-

ming ...), Lean Software Development

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

APPLICATIONS: Common productivity packages on Windows, OSX and Linux, TFX, LATEX, and BIBTEX, Vim, Eclipse, 2D/3D CAD/Drafting (Solid Edge)

OTHER: AWS (S3, EB, IAM, EC2, CloudFront, Route53 ...), Game Development, Unity3D game engine, Firebase, Gulp, Natural language processing with 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 & Using and Abusing Ruby For Computer Science Great Good Presentations Code and slides (PDF) available.

March 2016

June 2015

Building Objects With Functions

An interactive version as well as a recording are available.

Getting Started With DataScript and Reagent

November 2014

Slides are available online.

Experience

Relevent October 2015 - January 2016 Founder at Decacoder.com

> 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, Con-

tinuous integration, Continuous deployment, AWS, Gulp, Stripe, Education, UX

Founder, Cambridge Programmer Study Group 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

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

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 <u>Cambridge Broadband Ltd</u>. Worked on cross platform graphical user applications, embedded <u>C</u> 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 <u>C</u> 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

Intern, Organisations, Information and Knowledge Group

Summer 2009

I Worked as part of the Organisations, Information and Knowledge Group at the University of Sheffield building a term recognition system for engineering documents. I developed a semantic extraction component in Java using the NLTK library accessed in Jython. Also designed a domain ontology for aerospace engineering.

KEYWORDS: Java, Jython, Java Servlet, XML, RDF, Tomcat, NLTK

Awards

BA Crest Gold Award

Young engineers for Britain Regional Finalists 2005 Best Technical, Startup Weekend Edingburgh August 2012 Winner, Startup Weekend Sheffield July 2013 Winner, Startup Weekend Sheffield July 2014