

DEVIN BAYER'S

Holistic Computing Agency

PROGRAMMING / OPERATIONS / RESEARCH

Amsterdam — KvK 58177418 — dev@doubly.so



HIGHLIGHTS

- 16 years of professional experience on general computing projects
- Developing and operating large important systems, including:
 - **K-root**, one of the internet's 13 root DNS servers
 - the data pipeline for Fermilab's Tevatron, the largest particle accelerator before CERN
- Contributions to about 100 open source projects. Some recent examples on [my github profile](#).

INTRO

My goal is to find better methods of producing and maintaining large software systems. Almost all my life, I've been knee deep in a computing project or two, from assembling bits to mobile apps to huge data pipelines. So I'm not a specialist in anything, but have a good sense of how to approach a problem and can adapt quickly. My ideal is modest, un-clever architectures designed

for humans. If I should be found racking servers that's fine; if creating a new language is the right way forward, great! I enjoy doing code reviews and accepting criticism. The biggest obstacle I see to good products is ego and I think ideas should be disconnected from people. Between freelance assignments I spend my time playing with my own projects or just researching one of my other interests.

IN...

I WORKED AS A...

USING...

2014 →
Now

INFORMATICS RESEARCHER, aiming towards a future of more human, more effective computing, with a focus on an increased capacity to handle a large variety of data and software systems.

a bit of everything, but a lot of Python and custom DSLs



Publication: [Flying Disc Emoji Proposal](#) (2016), a new emoji for my favourite sport. Accepted by Unicode Consortium and arriving on phones in late 2018.

2018

BACKEND DEVELOPER for **SPAAZA TECH BV**, performing maintenance and modernisation to their microservice and serverless architecture.

Go AWS
ElasticSearch Lambdas

2017

DATA ENGINEER for **GREENPEACE**, building a new pipeline with a business intelligence UI to understand how their users work.

Python Google
Cloud BigQuery
Kubernetes

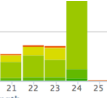

2016

SOFTWARE / SYSTEMS ENGINEER for **IRDETO**, a leading global security provider. My tasks were:

- scaling and automating the deployment of their video watermarking service
- developing a new reactive web portal

Python Angular
Meteor Docker
AWS Ansible

continued...

IN...	I WORKED AS A...	USING...
2015	SOFTWARE / SYSTEMS ENGINEER for SANOMA MEDIA , improving a portal to the clouds for facilitating a transition to their private datacenter, technical negotiation with vendors, developing the portal and better processes, like reviews and true CI.	Java Puppet JS AWS Django OpenStack Win 2012 React VMWare
2014	DEVELOPER for RADICALLY OPEN SECURITY , on the design of an open source anti-DDoS solution under an NLnet grant.	Perl NetFlow PHP nfsen
2010 → 2014	SOFTWARE, SYSTEMS & DATA SCIENTIST for the RIPE NCC as part of an elite team that managed over 200 systems at over 30 global sites including k-root, a critical piece of Internet infrastructure. We also developed datasets for a large Hadoop cluster and a highly dynamic web UI. On top of that we had a bunch of legacy responsibilities, but managed to meet our goals with good prioritisation and automation.	DNS Juniper Python Redhat CFEngine Hadoop MySQL Cisco Netflow Java Ansible Slunk
	Publication: Visibility of Prefix Lengths in IPv4 & IPv6 (2010), a study of the how network size affects global routability.	
2008 → 2010	SOFTWARE ENGINEER & TRAINER for PORTAONE on various aspects of their VoIP solutions, including customer training, coordinating development and implementing a distributed billing engine.	C / C++ RTP Python Java Perl Oracle
2006 → 2008	SYSTEM ENGINEER & HACKER for THE GAMBIA COLLEGE , where I had a variety of tasks in a challenging environment: <ul style="list-style-type: none"> - setting up a 200 PC network - customising FOSS solutions for the library and internet cafes - teaching basic computing classes to complete novices 	Win 2003 Ruby Java Win '95 DOS PHP Postgres MS Office x86 assembly
	One my most memorable bug fixes was had here, tracking down an integer overflow in the SYSLINUX boot loader for certain disk sizes.	
2005 → 2006	APPLIANCE ENGINEER for CAI NETWORKS , mostly independently launching a new global load-balancing appliance.	Busybox uClibc Redhat DNS
2003 → 2005	RESEARCH PROGRAMMER for THE UNIVERSITY OF ROCHESTER , where I had the privilege of building a data routing solution for Fermilab's Tevatron and a UI for a muon detection device.	IRIX C / C++ GTK ROOT
2003 → 2005	ALL-AROUND FREELANCER on RENT-A-CODER , where I worked extensively on desktop apps, drivers, system roll-outs and related projects.	C / ObjC Java Ruby Linux
2002 → 2003	MOBILE DEVELOPER for TRANSPORTATION SYSTEMS PLANNING in my hometown of Lebanon, NH, where I started of my professional career.	Ruby Palm Debian Postgres
2000 → 2002	SYSTEM ADMINISTRATOR for ELEKTRONO FREE SHELLS , a publicly accessible multi-user Linux environment run out of my home. To be honest, it was mostly used to run IRC bots.	Linux IRC Ruby Bash