Alberto Cortés
Curriculum Vitæ

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▬▬▬ General Information

Languages	Spanish (native)
	English (fluent, equivalent to CEFR C2 or Proficiency CPE)
GitHub	https://github.com/alcortesm
ResearcherId	http://www.researcherid.com/rid/L-5343-2014
LinkedIn	https://www.linkedin.com/in/alcortesm

▬▬▬ Desired Employment and Skills

I am looking for full remote jobs as a Go programmer.

During my academic years, I developed keen critical thinking skills and a high understanding of the core, theoretical concepts of computation and networking; I feel comfortable working with the mathematics of sophisticated data structures and algorithms.

As part of my current career path as a developer, I have acquired the practical skills needed in a professional setting and focus on maintainability and keeping complexity under control.

▬▬▬ Computer Skills

Languages	expert: Go (+5 years), bash. Intermediate/previously: Java, C, octave, LaTeX, Node.js, C++, Python, Lua, Lisp, C#, SR, Prolog.
Tools and Technologies	git (+internals), Docker and docker-compose, make, REST, telemetry (Prometheus, statsd, Grafana), Kubernetes, AMQP (RabittMQ), SQS, CI/CD (CircleCI, Github Actions, Bamboo, Travis), cryptography (SSH, IAM, JWT, Auth0, PGP), Couchbase, Mongodb, InfluxDB, GraphQL, Clouds (AWS, GCP), Graph DB (Neo4j), PostgreSQL, Redis, pthreads, tcpdump, sockets, strace, valgrind, gdb, GnuPlot, gRPC, Protocol Buffers, MessagePack, ns2, Omnet++, troff.
OSs	Linux (user-land and kernel). Plan9 (user-land and kernel), Windows XP, Symbian, Windows Mobile.
Protocols	HTTP, TCP, IPv4, UDP. SCTP, POP3, IMAP, 802.11b/g, Ethernet...

Experience

since 2020 **Senior Back-End Programmer**, *Couchbase*, Remote, US, India, UK.
- Full remote, team of ≈ 30 engineers, agile methodologies
- Product: Deploy kubernetes clusters running Couchbase for the clients.
- Main tasks: monitoring, alerting.
- Personal focus: maintainability, testing and keeping tech debt under control.

2017-2020 **Back-End Programmer**, *Senseye*, Remote, UK, US.
- Condition monitoring and predictive maintenance for factory assets
- Full remote, team of ≈ 10 back-end programmers, agile methodologies
- ≈ 100 services, ≈ 2-8 deploys to production per day
- Common tasks: adding new functionality and enabling the system to scale.
- Personal focus: maintainability, testing and keeping tech debt under control.

2015-2017 **Back-End Programmer**, *source{d}*, Madrid, Spain.
- Data processing pipeline for analysing git repositories
- Team of ≈ 1-4 programmers
- A Git internals re-implementation in Go (go-git)
- Abstract Syntax Trees generation and processing (bblfsh)
- Talks and blog posts:
  - Papers We Love Madrid meetup: Diff and Blame: an intuitive overview
  - Comparing Merkle trees: Comparing Git trees in Go

2004-2015 **Researcher and University Professor**, *UC3M*, Madrid, Spain.
- Teaching programming, OSs, concurrency and transport layer network protocols
- Experience writing technical documentation, presentations and public speaking
- Research projects: Measuring computational performance of mobile devices, Optimizing battery consumption of network protocols, Improving multihoming network protocols for streaming, Improving indoor localization techniques.

Education

2008-2012 **Ph.D. Telematics Engineering (Cum Laude)**, *UC3M*, Madrid, Spain.
My thesis (in Spanish); main contributions: An SCTP modification to improve handovers, a synthetic filesystem for the Linux kernel to improve multihoming support and a theorem for optimizing probe scheduling for the detection of uniform random events.

2005-2007 **M.Sc. Telematics Engineering**, *UC3M*, Madrid, Spain.

1995-2004 **B.Sc. Telecommunications Engineering (with Honours)**, *UC3M*, Madrid, Spain.

Interests and Hobbies

The Go board game (囲碁, 11kyu), free climbing, mini painting, Rubik's cubes, hacking, Science Fiction books, juggling.