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I CAN

- Listen to the customer, clarify their wishes, and discover hidden requirements.
- Lead software teams (so far, 0 to 6 other developers).
- Coordinate IT, creative staff, programmers, and management across multiple companies.
- Write clear specifications and proposals, whether brief (1 page) or elaborate (200 pages).
- Accurately estimate projects (so far, up to \$250,000 over 3 months for 3 developers).
- Architect cloud-based solutions for scalability and high availability.
- Conduct accurate capacity planning to maximize server ROI.
- Implement monitoring and automated configuration/deployment for high uptime and easy maintenance.
- Juggle competing priorities.
- Work productively with little supervision.
- Manage customer expectations.
- Argue a point and concede cheerfully if a team chooses something else.
- Design intuitive user interfaces.
- Design normalized and efficient database schemas, tune database settings, and fix slow queries.
- Judge when to build for tomorrow and when to build for now, when to abstract and when to code the thing itself.
- Track down difficult bugs with patience and not superstition.
- Package software so it is easy to install and deploy.
- Document the big picture and the hidden assumptions in code.
- Write flexible, penetrating tests to ensure correctness and cover edge cases.
- Choose an appropriate technology/platform for a given problem.
- Find existing libraries to avoid Not Invented Here syndrome.

I KNOW

Primary Languages	Ruby, Javascript, Python, C, C#, Java, Bash, SQL
Secondary Languages	Rust, Elixir, R, PHP, Perl, PL/SQL, Objective C (iOS), Visual Basic
Tertiary Languages*	Lua, Go, Scheme, Prolog, Octave, C++, MIPS Assembly, Pascal
Ruby Stack	Ruby on Rails, Haml, Stimulus.js, Sidekiq, Capistrano, Heroku, Spree, Innumerable gems
Python Stack	Django, Flask, SQLAlchemy, wsgi, numpy*
PostgreSQL	Custom C Extensions, PL/pgSQL, Tuning, Query Optimization, Replication, Training
Other RDBMSes	MySQL, MS SQL Server, Oracle, MS Access, FileMaker Pro, OLTP vs OLAP
NoSQL/AltSQL	Redis, MongoDB, Memcached, InfluxDB
Front end	React, Solid.js, Vue.js, Angular.js, jQuery, Ramda, Optimization
Scalability	Load-Balancing, Database Replication, Failover, Share-Nothing Architecture
AWS	Terraform, Cloud Formation, EKS, Lambda, Beanstalk, OpsWorks, Athena
DevOps	Kubernetes, Docker, Systemd, Chef, Ansible, Nginx, Apache, Munin, StatsD, Grafana
Social Media	Integration with Facebook, Twitter, Google, LinkedIn, Wordpress
Testing	RSpec, Capybara, Minitest, Jasmine, Python unittest
Source Code Control	Git, Github, Subversion, CVS, Clearcase*, RCS, Scmbug
Credit Cards	Stripe, PayPal, TSYS, Braintree, Cybercash, Payflo Pro
XML	SAX, DOM, XSLT, XPath, FO, XSD, DTD, namespaces, XMLRPC, SOAP, WSDL
Print	Prawn, Poi, L ^A T _E X, FrameMaker, QuarkXPress, Illustrator, Photoshop, Distiller
Net	DNS, FTP, SMTP, snoop, tcpdump, iptables, ipchains, ssh, rsync, DHCP
Miscellaneous	Unicode, Remind, Gnuplot, X11, GPG, JSON, YAML, Markdown

*Limited Experience

I HAVE DONE

Open Source Contributor

- Authored: Postgres multiranges, aggs_for_arrays, active_model_serializers_pg, Chef cookbooks, others.
- Contributed to: Postgres, Ruby on Rails, jQuery UI, Chef, Devise, Geocoder, others.
- Reported bugs for: rvm, acts-as-taggable-on, best_in_place, Maven, others.
- StackOverflow contributor with reputation of 21,762 as of 4 March 2022.

President

Illuminated Computing Inc., illuminatedcomputing.com

March 2006–present

- Developed rich, highly-scalable web & mobile applications for startups and online businesses.
- Took over and rescued several off-track projects by excellent client service.
- Built reputation for responsiveness, good listening, honesty, and concern for the client's best interests.
- Led distributed development teams to increase productivity and lower costs.

Founder & CTO

ElectNext, Inc., Philadelphia, PA

February 2011–March 2012

- Led product design and development for a web application to help voters find the best candidates.
- Designed Machine Learning algorithms to profile thousands of candidates based on millions of data points.
- Designed gamified system to crowd-source data on candidates and political issues.
- Accepted to DreamIt, Wharton Venture Initiation Program, and GoodCompany accelerator programs.
- Helped raise over \$100,000 in angel investments.

Software Engineer

Banta Integrated Media: Internet Solutions, Cambridge, MA

September 2002–August 2005

- Tech lead on several websites; programmed and directed other developers for up to a dozen at once.
- Responsible for everything from requirements gathering to design to implementation to launch to support.
- Negotiated and coordinated between IT, the customer, and other developers.
- Won more revenue by proposing projects that helped our customers.

I HAVE STUDIED

Greek, Latin, Distributed Computing, Machine Learning, Other Topics

Harvard Extension School, Cambridge, MA

1994, 2001–2005

Coursera (faculty from Stanford & TCS), online

2012

M.A. in Classical Studies

University of Pennsylvania, Philadelphia, PA

2007–2011

- Robert A. Fox Presidential Prize Fellow.
- Taught four semesters of Latin & Ancient Mythology.

B.A. in English Literature

Willamette University, Salem, OR

1995–1999

- Tested out of Intro to Programming.
- Took Data Structures & Algorithms, Programming Languages, Machine Organization.
- Minored in mathematics; gave an extra-curricular talk on Gödel's Incompleteness Theorem.
- National Merit Scholar; Magna cum laude; Phi Beta Kappa.

Other

- U. S. Security Clearance, DoD 8570 IAT-I
- Network+ Certified, 2021–present
- Eagle Scout, California Boys' State, High School & College Speech & Debate.
- GRE: 800 verbal, 790 math, 5.5 writing, taken October 2007.
- Active member of PDXRuby and Portland tech start-up scene.
- Have given talks on temporal databases, Postgres, ActiveRecord, Node.js, jQuery.