Rahul Garg

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Education

2012-08-01 | 2013-12-01
Master of Science in Information Technology, *Rensselaer Polytechnic Institute*, GPA: 3.9, *Troy, NY*.

2007-05-01 | 2011-06-01
Bachelor of Technology in Electronics and Communication Engineering, *Indian Institute of Technology (ISM)*, GPA: 7.14, *Dhanbad, India*.

Experience

2017-12-12 – Present
Software Engineer, *Nova Labs Inc.*, San Francisco, CA.
- Implemented a novel and publicly traded Blockchain written in Erlang
- Co-authored HoneybadgerBFT consensus protocol
- Co-authored Distributed Key Generation for the Internet
- Solving complex mathematical problems related to probability, cryptography and distributed systems

2016-10-24 – 2017-12-06
Senior Software Engineer, *Nimble Storage - Hewlett Packard Enterprise*, San Jose, CA.
- Owner of Test Execution framework written entirely in Elixir with full OTP behavior
- Wrote tool service monitor, mimics Apple System Status service with real time updates. Elixir/React

2016-07-01 – 2016-10-24
Software Engineer III, *Cisco Systems Inc.*, San Jose, CA.
- Automation Lead for Cisco Unified Computing System Virtual Interface Card team
- Mentored junior engineers

2014-02-03 – 2016-07-01
Software Engineer II, *Cisco Systems Inc.*, San Jose, CA.
- Automated SMB traffic generator for Windows platform for Cisco VIC adapter performance testing
- Developed easy to use Python APIs for Cisco VIC adapters multiple platform testing
- Wrote numerous standalone scripts using Powershell for automated testing of Blade/Rack server adapters for Windows platform
- Planned and exectured test plans for feature releases for Cisco's Unified Computing System with focus on Virtual Interface Cards

2013-05-01 – 2013-08-01
Software Engineering Intern, *Cisco Systems Inc.*, San Jose, CA.
- Scripted for SCVMM Hyper-V VM-FEX architecture
- Understood Hyper-V, Cisco UCS and virtualization stack

Skills

Languages Erlang, Rust, Elixir, Python

Web Phoenix, Flask

Infrastructure	Ansible, Heroku, AWS
Databases	Postgres
Virtualization	Docker, Hypervisor

Projects

kdtree, *erlang*.
Simple kdtree written in Erlang
https://hex.pm/packages/kdtree

vincenty, *erlang*.
Erlang library to calculate distance between 2 points with Vincenty's formulae
https://hex.pm/packages/vincenty

erlang-oc, *erlang, rust*.
Online-code rateless erasure codes
https://github.com/vihu/erlang-oc

erlang-fountain, *erlang, rust*.
Fountain code rateless erasure codes
https://github.com/vihu/erlang-fountain

erl-blake3, *erlang, rust*.
BLAKE-3 bindings
https://github.com/vihu/erl-blake3

erldpc, *erlang, rust*.
LDPC bindings
https://github.com/helium/erldpc

erlang-hbbft, *erlang*.
Honeybadger BFT consensus algorithm
https://github.com/helium/erlang-hbbft

erlang-dkg, *erlang*.
Distributed Key Generation algorithm
https://github.com/helium/erlang-dkg

gogo, *rust*.
Terminal bookmark manager
https://crates.io/crates/gogo

erlang_tc, *erlang, rust*.
Erlang bindings for threshold cryptography over BLS12-381 keys
https://hex.pm/packages/erlang_tc