





Mihir Singh

Seeking full time employment in infrastructure, platform, site reliability, and security engineering positions.





✂ Skills & Technologies

proficient = ["Python", "Go", "Infrastructure", "DevOps", "SSL/TLS", "Chef", "CI/CD", "Nginx", "Amazon Web Services", "REST", "Hitch", "Varnish", "Packer", "Site Reliability", "Automation", "Security", "Git", "Terraform"]
familiar = ["Swift", "Vue.js", "Ansible"]

📌 Experience # [webbrowser.open\("https://linkedin.com/in/citruspi"\)](https://linkedin.com/in/citruspi)

 Hudl	May 2016 - Present	 R·I·T	September - December 2014
<i>Infrastructure Eng., Site Reliability Eng.</i>		<i>Teaching Assistant, Advanced Free and Open Source Software Projects Seminar</i>	
 Hudl	January 2015 - May 2016		<i>System Administrator, Kate Gleason College of Eng.</i>
<i>Software Eng. Intern, Infrastructure</i>			
<i>Software Eng. Intern, Site Reliability Eng.</i>		 Apple, Inc.	June - August 2014
<i>Software Eng. Intern, Alpha (Video Encoding Farm)</i>		<i>Software Eng. Intern, GPU Software Eng. Org</i>	

📁 Projects # [webbrowser.open\("https://www.mihirsingh.com/projects/"\)](https://www.mihirsingh.com/projects/)

 Macallan TLS	2017 - 2018	 Triplecask	2017 - 2018
Zero-management Let's Encrypt tooling. Certificate requests and renewals are automated with AWS Lambda. Files are stored in S3 and the private keys are encrypted with KMS. CLI tooling to make requesting and deploying certificates a breeze.		A micro implementation of the ACME v02 protocol for requesting certificates from Let's Encrypt with a focus on minimal dependencies (Python + OpenSSL), DNS-01 domain validation, and easy "auditability."	
Python Go Amazon Web Services		Python	
 Straart	2018	 Tyr	2015 - 2018
IAM Managed Policy tooling - reduce code duplication with policy templates and define users, roles, etc that should be attached. Apply the local state to AWS, diff to detect unexpected changes to policies and attached users, roles, etc. Integrate with CI/CD to manage policies from e.g. GitHub.		Infrastructure automation framework used internally at Hudl for provisioning MongoDB, Nginx, Solr, Couchbase, Elasticsearch, IIS, etc. infrastructure. Also automates tasks such as Couchbase migrations, MongoDB upgrades, server replacements, etc. Turns 30 minute tickets into 30 second tickets.	
Python Amazon Web Services		Python Amazon Web Services	

🏆 Awards

- 1st Place, Random Hacks of Kindness Hackathon, Rochester (2013)
- Top 10 State Finalist, New Jersey Governor's Cyber Challenge (2013)
- National Finalist, U.S. Cyber Challenge (2013)
- 3rd Place, Technology Student Associate State Competition, Open Source Software Category (2013)

🌐 Community

- Advocate for open source software, the public domain, transparency, and security
- Alum: Free and Open Source Software Applied Research Lab, Hacks/Hackers Rochester, Computer Science House
- Tor Exit Relay Operator
- Contributed to and maintain numerous OSS projects