AKSHAY GOEL

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Skills

TECHNICAL

Java, C++, C#
Python
Hack (PHP), XHP
HTML, CSS, JavaScript
Node.js, MongoDB
Linux, Unix
MIPS32, x86 Assembly
Git
Hekaton

Amazon Web Services:

→ EC2, S3, ELB, Lambda, Kinesis, SNS, Machine Learning, Cloudwatch

SPOKEN LANGUAGES

English - Native Japanese - Native Hindi - Native

Activities & Leadership

VT Resident Advisor (Scholarship) 2016 - Present

Hackers@VT

Hacker Chair, Treasurer

VTHacks Organizer's Committee (Hackathon) Sponsorship Team & Android + Web Developer

VT Programming Team

VT Engineering Student Ambassador

Student Council President, High School

Education

Virginia Tech - Honors College

BS Computer Science 2019, with a minor in Math Major GPA: 3.97; Overall GPA: 3.93

Dean's List with Distinction: Fall 2015, Spring 2016, Fall 2016, Spring 2017

Employment

Microsoft - Software Developer Intern - Redmond, WA May 2018 - August 2018

• Redesigned Microsoft Azure's in-memory Hekaton SQL engine to support reads from secondary machines in master-slave cluster architectures.

Facebook - Software Developer Intern - Menlo Park, CA Jan 2018 – April 2018

- Developed a framework to reduce the launch time of a Facebook product from 8+ hours to less than 5 minutes using Hack, XHP and EntSchema.
- Created an advanced interactive messenger bot to announce election results live as they come in. Built the entire architecture in Hack, thoroughly tested, and made it asynchronously scalable to millions of chat threads.
- Regularly collaborated with project managers, designers, and other teams at Facebook. Learned how to lead meetings and create roadmaps.

Rackspace - Software Developer Intern - Virginia

(Fanatical Support for Amazon Web Services Team)

May 2017 – Aug 2017

- Developed a scalable orchestration engine for running mass automations on over 13,000 EC2 instances by checking AWS SSM agents and running audit tasks.
- Also created an API that posts to an endpoint when users make account modifications, by triggering a Lambda function with use of a Kinesis Stream.
- Became proficient in Amazon Web Services SDK, extensively used Git, and performed regular code reviews. Learned the value of Continuous Integration and having regular metrics & monitoring through Datadog and Cloudwatch.

Rakuten - Big Data Intern - Tokyo

July 2016 – Aug 2016

- Developed a full stack search tracker using Node.js and Cassandra for Rakuten's search engine to record all searches made up to 10 days.
- Tool runs automatically, tracks thousands of searches efficiently, and alerts Rakuten if there are unexpected significant changes in daily search results.

Motion Gallery - Software Developer Intern - Tokyo

May 2016 – July 2016

 Created a mini-theater service for cafes with basic Ruby on Rails and SQL3 using the Model-View-Controller architecture.

Personal Projects

Anonymously Text Anyone

July 2017

 Created an API with a UI to anonymously text anyone in the world by providing just a phone number. The API endpoint triggers an Amazon Lambda function which then sends the text through Amazon's Simple Notification Service.

Speedup Graphspace Queries (Undergraduate Research) Aug 2017 – Dec 2017

 Researched and sped-up Graphspace query search times up to 99.2%, by moving data to Elasticsearch from Postgres SQL, and getting paginated results.

Awards & Certifications

AWS Machine Learning Certification, Concepts Certification, Essentials Certification, LinuxAcademy - (Licenses 87604, 85998, 86719)

Bruce H. & Dorothy R. Pauly Scholarship, VT College of Engineering Recipient of CSRC Scholarship, Virginia Tech Computer Science Dept.

June 2017 Aug 2016

Jan 2016

July 2017

Most Interesting use of Twitter API, 3rd best hack at Hoya Hacks, *Twitter*