Alan Karimullah

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Skills & Experience

- Proficient in Java (concurrency, lambda expressions, exceptions, Collections, Swing and AWT)
- Competent in C++, Linux environments, Bash, Python, Git
- Experience with Scrum, code reviews, writing documentation, giving presentations, tutoring students
- Experience with customer liaison: support work, calls, site visits, coordinating system maintenances

Positions

Project Engineer — Evertz Microsystems Ltd. — 2018/09 – 2020/09

- Configured, upgraded, and maintained various parts of customer's end-to-end broadcast system
- Resolved five security vulnerabilities requiring configuration or new features:
  - explained requirements in detail to development teams, updated project manager on resolution timelines, deliberated with product lead about work and contract scope
  - work involved Linux sudoers, FTP server password requirement and corresponding updates of apps and scripts, configuration of HTTPS service with SSL termination on load balancer
- Tested and documented system support for new MPEG-DASH video proxy feature:
  - worked with development to allow further configuration to meet customer needs

Backend Engineer — Urban Compass, Inc. — 2017/05 – 2017/08

- Built Java and Python backend services using Thrift, gRPC and an HTTP-Thrift server
- Worked with Mobile team to proxy API requests via the HTTP-Thrift server to existing endpoints
- Created a week-long series of exercises, with 9 code labs, to help onboard new engineers quickly

Software Developer — UXP Systems Inc. — 2016/09 – 2016/12

- Automated the creation of Postman collections from the REST API to be used by any developer
- Created a Python script to publish Confluence pages with attachments via the Confluence REST API
- Improved a Bash script from 300 to 700 lines to automate most of the onboarding process

Java Developer — Citigroup Inc. — 2015/05 – 2015/08

- Pioneered the use of Graphite, a real-time metric monitoring tool, within the Rates division
- Built a loose-coupling Java library for different teams to publish application stats to Graphite
- Wrote a wiki on deploying, configuring and using Graphite effectively, and gave a presentation

Projects

Mandelbrot/Julia set image generator (Java)

- Extensive GUI, multi-window, multi-threaded, high use of inheritance and composition
- Interfaced the program with hand tracking and voice commands using an Xbox Kinect with a friend; our video demonstration is featured in OSPE's Nov. 2014 edition of *Student Notes*

Education

Bachelor of Mathematics, Computer Science, University of Waterloo — 2012/09 – 2018/04

- Minor in Combinatorics and Optimization, Minor in Computational Mathematics