Andrei-Niculae PETRE

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About

I'm excited about low-level programming and backend-oriented opportunities. I've got 4.5 years Java experience in AWS, 5 years Python experience as a full stack developer, 1.5 years C++ experience as a TA in university and an interest in open source, c(pp), python, golang, linux, rock climbing and chess. Check my website for a list of open source contributions. I'm also a member of ROSEdu, an organization that promotes open-source in education.

Experience

SDE, AWS RDS, Bucharest, Romania (Remote)   March 2022 - May 2023
SDE, AWS RDS, Vancouver, BC   Jan 2019 - Feb 2022
Amazon Relational Database Service (RDS) makes it easy to set up, operate, and scale a relational database in the cloud. It provides cost-efficient and resizable capacity while automating time-consuming administration tasks such as hardware provisioning, database setup, patching and backups.

- Designed and delivered XRAB (Cross-Region Automated Backups) - got a "Nice!" from Andy Jassy. Helped all RDS engine teams onboard XRAB, held L&Ls / training sessions to other RDS teams and mentored a summer intern on the project.
- Led a team of 3 other engineers (and got excellent feedback from them on it) to build an internal CRUD service to achieve complex search queries and requirements needed for an AWS goal release. It relied on DynamoDB and Lambda with Go.
- Worked on security threat modelling for two projects: above CRUD service and RDS EFS Integration for Oracle project.
- I was one of the few (1%) component owners of our RDS backend service.

Software Engineer, UpbeatPR, Bucharest, Romania (Remote)   Dec 2015 - March 2018
Software Engineer Intern, UpbeatPR, San Francisco, CA   Feb 2015 - Aug 2015
Highly targeted pitching process, enabled through our amounts of data we collected about journalists – PR without relationships.

- I was one of the first engineers at Upbeat, designed and built systems core to our business in Python, Django, Scrapy, Celery, ElasticSearch, Javascript (ES6), React, Redux and Ruby on Rails.
- Worked on all parts of delivering software: design, implementation, testing, deployment, continuous integration, maintenance, instrumentation and monitoring.
- Designed and implemented the data ingestion automation that powered our business. It started with a cost-effective feed poller (~650K new urls per day from 20K scraped feeds), a site scraper and an indexing system relying on ElasticSearch (~16M indexed articles) to provide our in-house PR agents a powerful tool for matching journalists with their area of expertise.

Software Engineer, dev.Label   Aug 2014 - Jan 2015
Full stack developer, used Groovy, Javascript, Coffeescript and ChromeDriver for working on trade.it, a multi-broker trading application, while in its early development stage.

Teaching Assistant, POLITEHNICA University of Bucharest   2013 – 2014, 2016 – 2017
Taught Data Structures & Algorithms class for 3 years, using C++. Also taught 3 other classes: Object Oriented Programming, Functional Programming and Complexity Analysis of Algorithms.

Software Engineer, UberVU (acquired by HootSuite, ~15M$)   Jun 2012 – Aug 2013
Social media analytics, monitoring and engaging dashboard.

- Started working at uberVU while still in college, and picked up best practices and new technologies I've never worked with before with tremendous speed.
- First as a Frontend Engineer, working on our own mozaic.JS (backbone.js based) framework that enabled the new interface that would lead to the acquisition of uberVU, just 4 months after my leave
- Then also working on the REST API for the JS frontend, using Django, Tastypie and mySQL
- Finally, worked on the Python backend pipeline that collected and indexed data into MongoDB and ElasticSearch, as well as on our CI system and deployment scripts

Education

BSc, Major in Engineering and Computer Science   Oct 2010 - July 2014
University POLITEHNICA of Bucharest, Romania
Faculty of Automatic Control and Computer Science