

# Andrei-Niculae PETRE

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**Objective** After having worked full-stack for 5 years, I'm looking for some low level programming opportunities. I've also got 1.5 years C++ experience as a TA in university and an interest in open source, python, 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** **Software Engineer, UpbeatPR, San Francisco, CA** Feb 2015 - present  
Highly targeted pitching process, enabled through our amounts of data we collected about journalists – PR without relationships.

- 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.
- Worked remotely  $\frac{2}{3}$  of my time at Upbeat, but, in spite of that, was able to become an asset to the team, helping my colleagues grow through well-thought and in-depth code reviews. Maintainer of our scraping system and of our data quality efforts.

## Selected accomplishments

- Implemented an indexing system using ElasticSearch, that powered an internal search engine that our PR agents used to pitch journalists - our primary business driver. We've indexed ~16M articles in ElasticSearch.
- Designed and built a cost-effective FeedPoller system that had daily volume of ~650K new urls per day from 20K feeds we had in our db. It was able to poll the feeds efficiently, each worker could handle hundreds of urls over a few seconds, doing asynchronous requests with a combination of gevent and celery. The system could easily scale horizontally.

**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 – Sept 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

**Skills**

**In Production:** Python, Django, Flask, ElasticSearch, mongo, Scrapy, Celery  
JS, nodeJS, React, Redux, CoffeeScript, jQuery, Backbone.js  
Git, Bash shell scripting, Heroku, PostgreSQL, ChromeDriver  
Groovy, Grails, Ruby on Rails

**In TA classes:** C++, Java

**In open source course:** C & GObject for Anjuta, a Gnome IDE, during an open source course, [CDL](#)

**In General:** Go, Scheme, Haskell, Prolog

**Certifications:** Linux (LPIC-1)