# **ALEXANDER TSANKOV**

### SUMMARY

Technical interests:

- · System automation.
- · Security infrastructure.
- All things "DevOps."

Passionate for programming and fascinated by large-scale system orchestration.

### CONTACT

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## **EDUCATION**

University of Colorado, Boulder B.A. Computer Science, Philosophy 2016 GPA: 3.63/4.00

## **SKILLS**

#### PROGRAMMING

Python

Go

Iava

С

BroScript

Javascript

#### WEB DEVELOPMENT

Ruby on Rails

D3 Visualization

NoSQL (Mongo, Rethink)

SQL (PostgreSQL)

Google App Engine

Python Tornado

#### **SYSTEMS**

Bash

\*nix Systems

Intrusion Detection Systems

Continuous Integration

**Process Automation** 

Juniper Firewalls

### **EMPLOYMENT**

Denver, Colorado Sep/2015 - Current

DevOps Apprentice
Supporting the Google Global Cache content delivery network (CDN).

- · Developing products for greater system automation utilizing workflow engines and machine learning.
- Building software to better collect and analyze remote device statistics.
- Maintaining connectivity with international ISPs.

#### CU Boulder's NGN Laboratory

Student Researcher

Workiva

Google

Boulder, Colorado 2014 - 2016

Boulder, Colorado

Jun/2015 - Aug/2015

Supported Prof. Keller and his "Next Generation Networks" lab in the development of:

- A software defined network (SDN) controller, specifically its integration with the Bro intrusion detection system (IDS).
- A continuous integration framework for Bro IDS which I presented at an Association for Computing Machinery (CODASPY-2016) workshop demonstrating its potential as a virtualized network function.

Summer Intern

- Worked to create scalable RESTful microservices to handle mail notifications and analytics.

   Services were written in Go and deployed to Google App Engine.
  - Developed a dynamic HTML templating structure.
  - C C I DECT.
  - · Crafted REST requests to internal and external APIs.

ioSemantics Summer Intern Golden, Colorado Jun/2014 - Aug/2014

Worked on a project to integrate an AI language parser with a custom IDE.

- Developed in Java with the Eclipse RCP framework. I focused on UI creation, data visualization with SWT graphics, and general UX.
- Exposed to script automation, and code documentation practices in an Agile start-up environment.

University of Colorado, Boulder Network Security Office, Student Assistant Boulder, Colorado 2013 - 2015

Worked to secure a 50,000+ host network and manage its security infrastructure.

- Managed \*nix servers and work stations, Juniper firewalls, and Cisco security appliances.
- Developed scripts for the campus' Bro intrusion detection system in a variety of high-security contexts.

ITL Laboratory, Student Assistant Administrator

Boulder, Colorado 2012 - 2013

Helped to maintain and build a large lab for 100+ users with a variety of different lab equipment hosts.

- · Built custom install images to deploy to workstations.
- Supported local Windows web and database servers.

# INDEPENDENT PROJECTS

#### Students for Instructional Improvement

Co-created and currently maintain an open-source Ruby on Rails site (2,000+ users/month) that summarizes and visualizes CU Boulder professor evaluation statistics. This project involves:

- Scraping and cleaning large amounts of data.
- Building a robust, and fast back end.
- Managing deployment in testing and production environments.

 $Lead\ a\ team\ of\ six\ seniors\ developing\ a\ high\ performance\ student\ feedback\ system\ using\ Python\ Tornado\ and\ RethinkDB.$ 

Hackathons

**PenApps XIII** - Machine learning models to make predictions about blood glucose levels based on activity data. **Money20/20** - Proof of concept phishing incentivization system that tied responses directly to monetary transactions. **Coinorado** - SMS-based Bitcoin transfer system for interaction with the blockchain from low-end feature phones.

# AWARDS AND RECOGNITIONS

Invited to Present at NFV World Congress - Association for Computing Machinery

Apr/2016

Matthew Monaco; Alex Tsankov; Eric Keller. Taking the Surprise out of Changes to a Bro Setup. 6th ACM Conference on Data and Applications Security and Privacy (CODASPY-2016). New Orleans, LA.

DePauw Undergraduate Ethics Symposium - Prindle Institute of Ethics, DePauw University 2015
Invited to discuss and present *The Ethical Automaton*, a paper about the ethical issues surrounding autonomous vehicles.

Cisco Certified Network Associate (CCNA)

2010

Guinness Certified "Perfect Pint Pourer"