

# Patrick E. Vargas

## Skills

### Languages and Databases

» Scala (preferred), Java, Python, Groovy, PostgreSQL, MySQL, Vertica

### Software, Frameworks, and Utilities

» Scala Play Framework, AWS, Ansible, Docker, Jenkins, PySpark, Git, GitLabCI, DataDog

## Experience

### Software Engineer

Tremor Video DSP

New York, NY

Aug 2018 -- Present

#scala #play-framework #adtech #python #spark #machine-learning #neural-network #kubernetes #airflow

- » Implemented Data Science machine learning into production through daily model builds using Airflow and PySpark.
- » Created application to help internal sales operations make better informed decisions on campaign efficiency.
- » Lead a team of international developers to enhance the platform with new functionality and sales opportunities.
- » Worked on high-trafficked, real-time bidding application which served millions of requests per second.

### Associate Software Engineer

Disney Streaming Services

New York, NY

Nov 2016 -- Aug 2018

(Previously BAMTECH Media, Previously MLB Advanced Media)

#java #spring #jersey #memcached #node #npm #docker #git #aws #jenkins #groovy

- » Led my team in constructing a new shared Jenkins library.
- » Mentored junior developers in software engineering best practices (pull-requests, software construction, testing).
- » Refactored major parts of the application into smaller micro-services.
- » Facilitated performance testing with QA team to vet the application before launch.
- » Fixed issues for clients in a timely manner.
- » Implemented extended functionality based on client requests.
- » Instructed new team members on the intricacies of applications.
- » Learned the best practices of a highly-available, large-scale application.

### Software Engineer

Pitney Bowes Software

Boulder, CO / Somerset, NJ

Jun 2014 -- Nov 2016

#rails #groovy #java #spock #postgresql #jenkins #git #gitlab #aws #bootstrap

- » Implemented a status reporting website for stakeholders utilizing the Jenkins API.
- » Led my team in the transition from SVN to Git, providing tools and documentation to make the switch seamless.
- » Built and automated a SQL testing framework for our data production pipeline.
- » Setup a Continuous Integration server, using Jenkins, for our project space.
- » Volunteered as Documentation Lead and Scrum Master to streamline efficiency of day-to-day team minutia.
- » Created a per-revision, performance-testing and reporting system for a high-profile project.

## Projects

### Historian / Forecaster

Tremor Video DSP

Jun 2019 -- Sep 2020

#scala #playframework #python

- » Created application to help sales operation team query database for historical information.
- » Built system to store data compactly for quicker retrieval.
- » Lead a team to build a forecaster based on the historical data to help make our platform competitive.
- » Architected the api for integration with other apps.

### Airflow Stabilization Project

Tremor Video DSP

Sep 2018 -- Jun 2019

#python #airflow #pyspark #datadog

- » Stabilized production changes through implementing software release best practices and version control.
- » Built framework for Data Science to easily implement machine learning algorithms in PySpark.
- » Developed dashboard and monitors to better understand at a glance the health and spend of the system.

### Shared Jenkins Library

Disney Streaming Services

Jul 2017 -- Aug 2018

#jenkins #groovy #sonarqube #mvn

- » Architected a shared Jenkins library to be used by all teams in organization.
- » Lead the direction of implementation for team members.
- » Mentored junior developers in software engineering best practices (pull-requests, software construction, testing).
- » Improved overall code quality with automated SonarQube analysis on pull requests.
- » Bolstered use of library through automated JavaDoc publication and thorough wiki documentation.

### Stats API

Disney Streaming Services

Nov 2016 -- May 2017

#java #spring #aws #memcached

- » API Built for National Hockey League (NHL), Major League Soccer (MLS) and LoL.
- » Highly available application, accessed in a variety of devices.
- » Provided support to clients using the API.
- » Used Memcached to allow for 800,000 concurrent users, at 1000 messages per second.

### Geocoding Data Report

Pitney Bowes Software

Feb 2015 -- Nov 2016

#aws #beanstalk #rails #groovy #postgresql #jenkins

- » Presented product managers and other stakeholders with the most important, up-to-date product production status in an easily consumable website.
- » Automatically collected and intelligently predicted quarterly production plans for efficient and minimal quarterly planning meetings.
- » Provided automated, up-to-date, detailed information concerning specific product information for use by customer service representatives and engineers.

## Education

### University of Colorado Boulder

Boulder, CO

Aug 2009 -- May 2014

Bachelor of Science, Computer Science, 3.35 GPA

- » Atmospheric and Oceanic Science Minor
- » Technology, Arts and Media Minor (Graduated with Honors)
- » Dean's List, Spring 2014 and Spring 2013, College of Engineering and Applied Science
- » Dean's List, Spring 2011, College of Arts and Science

[yesthispatrick.com](http://yesthispatrick.com)  
[patrick@yesthispatrick.com](mailto:patrick@yesthispatrick.com)