Aaron Peters

Python Developer

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Synopsis

Jet fighter pilot, a doctorate in mathematical physics and a mirror that orbited Saturn on the Casinni-Huygens spacecraft. Five years' of full-stack Python production experience with 3 years full-stack development. Advanced mathematical training and experience in statistical analysis, differential and integral calculus, linear algebra, generalized coordinate systems & transformations.

Work Experience

Languages:

OOP, Python, some C, Golang, SQL, Javascript, jQuery, CSS, HTML, XML, Jinja

Databases:

NoSQL, SQL, DAO, ORM

Tools & Systems:

Flask, Git, VI, SQL, MongoDB, VMWare, VirtualBox, JSON, AJAX, REST, WSL, DBeaver, Studio 3T for Mongo, PyCharm, Selenium, Robot Framework, Jenkins

Fameworks & Libraries:

Anaconda2, SciPy, Numpy, NLP Toolkit, scikit-learn, Pandas, matplotlib, jQuery, AngularJS, Angular 6, some ReactJS

Platforms & Achitectures:

Google, AWS, Heroku, Kubernetes, Docker, Ubuntu, Windows, Enterprise Service Bus

Python Developer & Data Analyst

November 2017–Present
Numbers USA | VA
Application Development and Data Analysis

Senior-level Python developer with full stack production experience. Advanced mathematical analysis with a track record in fundamental research.

1. Led small team of back-end developers, from requirements gathering to deployment of online donation API. Integrated a third-party API with webhooks for payment services, as well as cron and Redis jobs to handle required routine and long-term jobs. Functionality for administrative tasks, e.g. handling CSV files and images.

2. Responsible for building an algorithm that classified donors as new, existing, or caged based upon name, address, and other information available from the front-end. Caging was done against across 3 million users, with 90% improvement.

3. Categorized 2.5 million passwords as plain text, MD5 hashed, bcrypt, and hashed.

4. Work with AWS S3 buckets, and Google cloud with Kubernetes and Docker.

5. Stackoverflow: Cubic analysis with bisection (find-intersection-of-ax-and-by-in-complex-plane-plus-corr-x-and-y)

Full Stack Python Developer

September 2015–July 2017
G&G Outfitters | MD
Application Development

Mid-level Python developer with full stack production experience. Advanced mathematical analysis with a track record in fundamental research.

1. Implemented several user stories that interfaced with third party API REST architectures to return large cXML payloads. After parsing data automatically created & emailed spreadsheet reports. Utilized DOA and ORM to update non-relational and SQL databases dynamically.

2. Built UI that implemented business rules for a procurement process incorporating x-editable with AngularJS embedded in an Enterprise Service Bus. Built RESTful calls to manage the business logic leveraging existing services. Incorporated Bootstrap modals, tables, and forms. Generated automatic emails and web based notifications.

3. Stackoverflow: Deploy Django to AWS (deploying-django-to-aws-wsgipath-refers-to-a-file-that-does-not-exist)

Natural Language Processing & Data Analysis

January 2013–September 2015
Peters Development Services, L.L.C. | VA
Engineering Services & Scientific Research

Building on the work of Noam Chomsky's Manufacturing Consent, developing code for on-line application visualization of language diversity across large database of news paper articles.

1. Deployed application on Heroku. SendGrid handles email server functionality.Webhose.io used for data stream and SQL database to persist data across sessions.

2. Implemented Running Karp-Rabin Greedy String Tiling algorithm from the ground up to manage news data feed from Webhose.io. SciPy/Numpy, NLTK and MatplotLib provide data analysis tools.

Naval Jet Fighter Pilot

U.S. Navy | China Lake, CA
Government & Military

Veteran of foreign war and awarded the Navy Achievement medal for valiant action.

EDUCATION

Postdoctoral Fellow | Theoretical Physics | West Virginia University

Doctorate | Theoretical Physics | College of William & Mary

Bachelor's Degree | Mechanical Engineering | US Merchant Marine Academy