JOHN PRATT

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EXPERIENCE

Pratt Industries, Remote (Vienna, VA)   **May 2020 - Present**
Founder/CEO, Software Engineer, Coach
- Taking on local & non-local life coaching, career coaching & IT consulting projects as my schedule allows; looking to wind down operations & take on my next full-time/long-term contract role
- Sourced, trained & supervised international team of 5+ freelancers to handle day-to-day business ops work for the firm, including sourcing & qualifying new work leads
- ContentMachine - Gained ~100k views on TikTok so far by creating a fully automatic cloud-deployed pipeline for AI-generated short-form entertaining videos. Uses Python, AWS, OpenAI's API, NLP, & more

Duke Energy Corporation, Remote (Charlotte, NC)   **Jul 2021 - Jan 2024**
Senior Software Engineer
- Saving Duke ~$1M in Labor Capacity by end of 2024 by leading backend & DevOps for Orbit, an iPad app replacing manual data acquisition and logging at ***100 Duke power plants with several thousand users.*** Used Python, AWS (Lambda, API Gateway, CloudWatch, VPC...), Terraform, Bash, Concourse, Node.js, & more
- Enabled user file attachments by integrating Orbit API with AWS S3 with custom Terraform module
- Enforced 90% code coverage for Python unit tests, ensuring code reliability
- Coordinated, managed, and performed production releases
- Accelerated prod incident tracking with DynaTrace/AWS X-Ray dashboards, to ease process of issue tracking
- Eased onboarding and reduced release times by 30% by refactoring API endpoint Terraform code
- Sped up AWS Lambda functions by 21% using shared runtime environment & caching
- Created best practice documents for API endpoints, unit testing, linting, documentation, future AWS infrastructure
- Shrunk Concourse codebase by 35% by migrating from Terraform OSS to Enterprise
- Reduced infra PR merge time by 8-24h by migrating AWS infra from shared to dedicated environment
- Enhanced code quality & security by integrating SonarQube, Sonatype IQ, & CheckMarx into CI/CD pipeline
- Streamlined communication of new API features w/custom AWS infra for dynamic SwaggerDoc generation
- Boosted reliability of Orbit API with Postman integration/load tests, written with auto-generating web-scraper
- Reduced Integration Test PR merge time & codebase size by ~94% with Chai.js/JavaScript Postman helper functions
- Led collaborative efforts with 5+ Duke "Communities of Practice", along with 6+ project teams, enabling scalable & reusable features and cross-project collaboration
- Enhanced custom SwaggerDoc security w/custom Node.js authorizer, ensuring incoming traffic was from Duke network

Capital One, McLean, VA   **Summer 2017, 2018; Aug 2019 - Jun 2021**
Software Engineer; Technology Development Program Mentor; Software Engineer Intern
- Saving Capital One ~***$10k in fines per customer annually*** by creating the data fulfillment pipeline for CCPA compliance for its ***100 million customers***, enhancing customer privacy. Used Python, AWS, Docker, Java Spring Boot, Apache Airflow, Apache Kafka & more
- Wrote component for processing & uploading zip files of customer assets (CCPA records) to S3 & alerting web app team via Apache Kafka so they can email customers
- Created Kafka consumer component to process privacy requests ready for processing by our pipeline
- Helped create Python component "Query Builder" to dynamically generate PostgreSQL & Snowflake queries
- Facilitated project shifts for improved value-add & return offers for 2 interns while leading professional development for 5 engineers
- Ensured seamless CI/CD by increasing unit test coverage to 90%+ for all components in our pipeline
- Screened 20+ software engineer applicants & got 1 peer hired at the firm by engaging in technical interviews & recruiting

- Supported Capital One pilot-program data warehouse SaaS (Slingshot) - Python, Java Spring Boot, AWS ECS, Docker, AWS DynamoDB, protobuf/gRPC, React, Snowflake

Lockheed Martin, Manassas, VA   **Summer 2015, Summer 2016**
Tech Intern; Senior Tech Intern **(held Secret Security Clearance in 2016)**

EDUCATION & CERTIFICATIONS

Georgia Institute of Technology, Atlanta, GA
- Bachelor of Science, Computer Science (concentrations: Artificial Intelligence, People**)**

Introduction to Generative AI, Google Cloud	**July 2023**
Introduction to Large Language Models, Google Cloud	**July 2023**
Introduction to Responsible AI, Google Cloud	**July 2023**
HashiCorp Certified: Terraform Associate (002), HashiCorp	**Dec 2022**
AWS Certified Solutions Architect (SAA-C02), Amazon Web Services	**Apr 2021**
Certified Cyber Security Examiner, Secure Code Warrior	**Sept 2020**

SKILLS

Languages, concepts:
Python (2, 3), Bash, Terraform (OSS, Enterprise), JavaScript (Node.js, React, Angular), Docker, Java (Spring Boot), Go; unit testing, integration testing, smoke testing, performance testing, test-driven development; CI/CD (continuous integration and continuous deployment), DevOps, GitOps, Databases, SQL (PostgreSQL/Postgres, MySQL); NoSQL (DynamoDB, mongoDB); microservice architecture, cloud pipelines, data pipelines, CI/CD pipelines; Object Oriented Design; REST/RESTful APIs**;** OAuth2 flow; cloud infrastructure, Infrastructure as Code (IaC), configuration management, software development best practices, troubleshooting, refactoring, analyzing & prioritizing business objectives; monitoring and logging; containerized workloads, serverless architecture; orchestration; serialization; automated testing; debugging; containerization; large language models, prompt engineering

Libraries/frameworks:
pip, pipenv, pytest, requests, boto3, unittest, coverage, requests_mock, moto, pandas, NumPy, Selenium, yt-dlp, MoviePy, mutagen, pydub, pickle, Python Imaging Library (PIL/Pillow), PRAW (Python Reddit API Wrapper), spaCy, NLTK, OpenAI, Tkinter, inflect, Django; TikAPI; nvm, npm, gatsby, yarn, webpack, Chai.js; Maven, JUnit, PowerMock, Mockito, Apache Avro

Tools:
macOS, Windows, linux, unix, Ubuntu; Concourse, Postman, Jenkins; Amazon Web Services (API Gateway, Lambda, CloudWatch, CloudTrail, IAM, XRay, S3, CloudFront, DynamoDB, EC2, ECS, Route 53, WAF, VPC, EventBridge, CloudFormation templates, Secrets Manager); Azure (Active Directory/Entra ID), Google Cloud ("GCP" - Firebase, Firestore); ffmpeg, pybdub; PlantView, Apigee, DynaTrace; HashiCorp Envconsul, Vault; SonarQube, Checkmarx, Sonatype IQ; Artifactory, Sonatype Nexus; Git/GitHub, BitBucket; cURL, Snowflake, HomeBrew; Splunk, PagerDuty; Apache Airflow, Kafka, ZooKeeper; Agile, Scrum, JIRA, Confluence; OpenAI API (Whisper, GPT), Eleven Labs API, TikTok API, Pexels API, Pixabay API, Playwright; Swagger, OpenAPI; JSON, YAML, XML, HTML; ChatGPT, Amazon CodeWhisperer, Claude, GitHub Copilot

Soft/People:
Project management, SDLC (software development lifecycle), talent development, mentoring, recruiting, public speaking, leadership, code review, problem-solving, decision-making, writing user stories, constructive feedback