






Jason Brazeal

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Experience





 Apr 2019 – Sep 2023
 San Francisco, California

Staff AI Engineer

Mya Systems (acquired by Stepstone)

- supported and extended the conversation engine at the core of Mya's AI recruiting solutions (Python/Celery/Flask/Redis/Sagemaker)
- trained, deployed, and maintained ML models for intent classification, entity recognition, and other NLP-related tasks (Python/Pandas/Numpy/Scikit-Learn/Tensorflow/Sagemaker)
- architected and developed new features such as robust foreign language support, language switching, and job searches in conversations (Google Translate/Elasticsearch/Sagemaker)
- studied the latest LLM research and implemented ideas from papers in code experiments on RAG, prompt engineering, hallucination mitigation, agents, etc. (OpenAI/LangChain/Chroma)





 Jul 2018 – Jan 2019
 San Francisco, California

Senior Backend Engineer

Primer AI

- deployed and maintained data ingestion pipelines to enable large-scale machine learning analyses of natural language data (Python/Docker/Kubernetes/AWS)
- designed and coded REST APIs and other infrastructure backing web-based interfaces to artificial intelligence software (Python/Flask/React)
- provided technical leadership and advisement as a member of the Platform Infrastructure team through code review, tech talks, interviewing, and mentoring



 Jul 2017 – Jul 2018
 San Francisco, California

Principal Software Engineer

Medal

- contributed to data engineering efforts to ingest medical data (structured and unstructured) from a wide variety of sources and preprocess them for model training (Python/AWS)
- coded Search & Summary web application, in which preprocessed medical records and clinical data could be examined and summarized using machine learning (Python/Django/Javascript)
- integrated HIPAA-compliant AWS S3 storage, SQS/SNS, and OAuth2 authentication into Medal's platform and applications
- provided guidance on technical architecture, scoping, preliminary cost analysis, etc. and served as leadership and a mentor to the engineering team



📅 Dec 2015 – Jun 2017
📍 remote

Software Engineer Verodin

- contributed code to the front and back end of Verodin's Security Instrumentation Platform, an innovative, evidence-based approach to managing cybersecurity
- implemented new features and fix bugs in a massive Ruby on Rails application and supplementary Python-based systems
- wrote functional tests and unit tests for Rails back end and client-side Javascript, and configured them to run in CICD system (Jenkins/RSpec/Capybara/Poltergeist/PhantomJS/Jasmine/Teaspoon/Mocha)
- created and maintained dynamic graphics for the Rails application front end (d3.js/amcharts)



📅 Sep 2014 – Dec 2015
📍 Boca Raton, FL

Python Developer Tyco Technology & Innovation

- developed web and embedded applications for Tyco On, an IoT initiative to create an integrated data and smart services platform for a billion plus devices deployed around the world
- created REST services to support hardware development, such as MAC address provisioning and device authentication using LDAP and TOTP
- implemented the device health and management service, a scalable cloud system to handle device sessions and track heartbeats (Python/Twisted/RabbitMQ/MariaDB)
- designed and built network device simulators to test cloud-based systems' processing of AMQP, UDP, and HTTP/REST communications from devices
- deployed several web applications including a real-time device data/monitoring dashboard, device log tracker, and custom online reports using GitLab's REST API (Python/Twisted/RabbitMQ/Flask/WebSockets/MariaDB/Javascript/d3.js)



📅 Jul 2013 – May 2014
📍 Austin, TX

Software Developer / Analyst The University of Texas at Austin Identity & Access Management

- built middleware to integrate Toopher mobile app-based second factor authentication into existing legacy web systems using a REST API (Python/Django)
- configured development server for existing Digital Downloads service and deployed service to new load-balanced virtual host (LAMP/Python/Fabric/Bash)
- replaced cookie-based authentication with OpenAM WPA-based authentication system for Digital Downloads service
- devised browser-based test suite for our web applications that greatly reduced manual workload (Selenium)

- maintained custom IT service provisioning web application and evaluated new IT service management vendor products based on ITIL standards (Service Now/BMC Remedy/Cherwell)
- set up daily mainframe database to relational database ETL process for IT service provisioning application (IBM z/OS mainframe/Natural/Adabas/MySQL)
- collaborated closely with technical infrastructure team for routine and emergency maintenance on Red Hat Enterprise Linux servers
- taught Web Application Security course based on OWASP Top Ten and Python/Django course for campus developers

Software Developer

The University of Texas at Austin
Office of the Registrar

📅 Feb 2012 – Jul 2013

📍 Austin, TX

- gathered requirements, designed, and built extension of student web registration available to 50,000+ students for canceling their registration for the upcoming semester (IBM z/OS mainframe/Natural/Adabas/Python/Django)
- served on development team for custom-built course and room scheduling web application with used to schedule, track, and report on all courses taught at the University (Python/Django/HTML/CSS/Javascript/jQuery)
- maintained and improved several legacy Registrar systems including adding a messaging component to administrative web registration

Spanish / French Instructor

The University of Texas at Austin
Department of Spanish & Portuguese
Department of French & Italian

📅 Aug 2002 – Feb 2012

📍 Austin, TX

- taught Spanish and French courses to graduate and undergraduate students
- spent two years teaching English comprehension and translation (ESL) in France to university and elementary-age students
- drafted class handouts, practice exercises, quizzes, lesson plans, exams, and study guides
- volunteered for and presented research at professional linguistics conferences



📅 May 2010 – Aug 2010

📍 Paris, France

Phonetics Research Intern

Ecole normale supérieure

Laboratoire de Sciences Cognitives et Psycholinguistique

- wrote Python scripts for presenting and collecting data in phonetics experiments
- recruited and scheduled subjects, recorded and prepared spoken language stimuli, administered perception tests
- performed measurements and statistical analysis on speech data

Education



**Supervised Machine Learning: Regression and Classification
Advanced Learning Algorithms**
Unsupervised Learning, Recommenders, Reinforcement Learning
Coursera, Andrew Ng



Computer Architecture & Assembly
Introduction to Networking
City College of San Francisco



Webmaster Certificate
Austin Community College



Software Developer Training Program
University of Texas at Austin, ITS
M.A. in Romance Linguistics
University of Texas at Austin



A. B. in Linguistics
University of Georgia

Top Tools



Tools

Python, Flask, Django, FastAPI, Ruby, Rails, HTML5, CSS3, Javascript, d3.js, NodeJS, REST, JSON, YAML, GraphQL, HOTP/TOTP, RabbitMQ, Pika, Twisted, SQLAlchemy, Mosquitto, Paho-MQTT, Elasticsearch, OAuth2, Google Cloud APIs (Translate, Drive, STT, TTS, Compute, Storage, etc.), Linux (Debian/Ubuntu/RedHat), Network Protocols (TCP, UDP, TLS/SSL, HTTP, Websockets, MQTT, AMQP, Google Protocol Buffers, etc.), Wireshark, Bash, AWS (VPC, EC2, ECS, ECR, Lambda, EBS, S3, Glacier, RDS, DynamoDB, SQS, SNS, IAM, Cognito, Sagemaker), Docker, Apache, mod_wsgi, Nginx, uWSGI, Unicorn, Uvicorn, Vagrant, Virtualbox, VMWare, Fabric, Git, GitHub, GitLab, Selenium, MySQL, MariaDB, PostgreSQL, Oracle, SQLite, Memcache, Redis, LDAP, Natural/Adabas, IBM Mainframe, z/OS, Batch Processing, OOP, Agile, Scrum, Kanban, Atlassian (JIRA, Confluence, HipChat, Bitbucket), Jenkins, TeamCity, Slack API, Discord API, Android, Sketch, Figma, NLTK, spaCy, Tensorflow, scikit-learn, OpenAI API, LangChain, Gradio