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INTERESTS & SKILLS

Skills: machine learning, software engineering, data analysis, applied statistics, NLP, computational linguistics
Interests: cycling, synthesizers, cooking, traveling **Languages:** Python, Go, Java, Scala, Javascript, Nim, Bash
Libraries: Tensorflow, scikit-learn, pandas, Spark, Airflow, Dask

EXPERIENCE

- **Slack Inc.** San Francisco, CA
Senior Machine Learning Software Engineer *July 2019 – Present*
 - **Semantic Search Engine:** Developed, designed, and productionized a new approximate nearest neighbor search engine for semantic and social graph embeddings that is used as part of Slack's search infrastructure - serving 1000 RPS, written in Java, utilizing Airflow, Spark, Tensorflow, gRPC, and Kubernetes.
 - **Malware Detection Service:** Developed, designed, and productionized a new malware detection service used in Slack's file upload pipeline - serving 300 RPS, written in Go, utilizing YARA, gRPC and Kuberenetes.
- **Splunk Inc.** San Francisco, CA
Senior Machine Learning Software Engineer *Dec 2016 – July 2019*
 - **Machine Learning Toolkit:** Developed, designed, tested, and released multiple versions of an app used to facilitate and simplify statistical modeling and machine learning; including modeling training, scoring, visualization, regression, classification, outlier detection, time series analysis, model serialization, and data preprocessing.
 - **Custom Algorithm API:** Designed, implemented, and documented an external python machine learning estimator API for adding custom algorithms and procedures to the Machine Learning Toolkit. Provided examples of custom algorithms and serialization for customers.
- **Splunk Inc.** San Francisco, CA
Senior Technical Training Instructor *Aug 2014 – Dec 2016*
 - **Analytics and Data Science Course:** Helped design a three day course covering exploratory data analysis, clustering, regression, classification, model validation, residual analysis, text vectorization, cross validation, etc. Taught the class to over 200 customer accounts and 1000 students, trained new instructors to teach the class, and developed additional material to supplement the lessons.
 - **Teaching:** Led instruction and labs for advanced searching and reporting, dashboarding, visualizations, distributed searchig and indexing, high availability and diaster recovery, as well as management of indexing, forwarding, security and authentication.
- **Information Technology Group at the Gevirtz Graduate School of Education** Santa Barbara, CA
Technical Consultant *Jan 2010 – June 2014*
 - **Remote Management & Automation:** Wrote Python, bash, and PowerShell scripts for remote management, data collection, and automation of classrooms, research labs, faculty, and sundry IT infrastructure.
 - **Maintenance & Repair:** Maintained, cataloged, repaired, and deployed macOS, Windows, and Linux machines for students, clinicians, and faculty including tasks such as backups, data recovery, documentation, imaging and HIPAA compliance.

EDUCATION

- **General Assembly** San Francisco, CA
Data Science Immersive *Nov 2014 – Feb 2015*
- **Univeristy of California, Santa Barbara** Santa Barbara, CA
B.A. in Linguistics, Dean's Honors List (GPA 3.5+) *Sept 2010 – June 2014*

RESEARCH

- **The Role of Infelectional Morphology in Co-occurrence Semantic Representations:** Honor's thesis paper and winner of the Undergraduate Paper of the Year in Linguistics award. Explores how morphological vectors can add value to vector space models when simulating simple cognitive tasks.