

# Sean Erfurt

Santa Monica, CA | (817) 404-8765 | [serfurt1@gmail.com](mailto:serfurt1@gmail.com) | GitHub: <https://github.com/SeanErfurt/samples>

## SOFTWARE ENGINEER

Skilled software engineer with over 8 years of experience in data engineering, software development, and web applications. Proficient in: developing and managing data ingestion systems using both web scrapers and APIs; data analysis and visualization; and optimizing backend systems in cloud environments. Expertise in Python and multiple SQL varieties, with hands-on experience in machine learning, ERP systems, and cybersecurity. Strong collaborator with a background in Agile methodologies, contributing to cross-functional, distributed teams and driving improvements in data processes and performance. Adept at problem-solving in high-pressure environments and improving system reliability and scalability.

## KEY SKILLS

Programming Languages:	Python / Django   Java / Android   PHP / Drupal   JavaScript, HTML, CSS   PowerShell, Bash, VBA, Perl, R
Databases:	MSSQL, PostgreSQL, SPARQL, GraphQL
Cloud:	AWS: EC2, S3   Docker, Kubernetes   Kafka, RabbitMQ   Heroku
Analysis:	sk-learn, pandas, NumPy, SciPy
Visualization:	Alteryx, Excel, PowerBI
Monitoring:	Sentry, Datadog, Cloudbees (Jenkins)
Other Tech:	OCR, neo4j, Elasticsearch, PyTest
Native Languages:	English, Spanish
Compliance:	HIPAA and GDPR trained

## PROFESSIONAL EXPERIENCE

### Tenable, Inc. | Remote | Software Engineer

March 2022 – Sept 2024

- Created new data ingest feeds and generated Nessus plugins using Python and the proprietary NASL language.
- Monitored and debugged security advisory data feeds using PyTest, Sentry, Datadog, and Cloudbees (Jenkins).
- Utilized Kubernetes, Docker, and Kafka through internal frameworks to manage cloud microservices.
- Ensured reliable data ingestion during major advisory releases like MSFT Patch Tuesday or Oracle CPU.
- Coordinated with my team remotely using Slack, Agile methodologies, weekly Zoom standups, and Jira.
- Gained experience in continuous integration, microservice architecture, and cybersecurity domain knowledge.

### Ryan, LLC | Dallas, TX |

Feb 2018 – March 2022

#### May 2019 – March 2022: Data Engineer II

#### Feb 2018 – May 2019: Formerly Data Engineer

- Managed delivery of data extraction and analysis services in a wide range of industries using technologies such as:
  - Enterprise Resource Planning (ERP) systems like SAP, Oracle, JD Edwards, PeopleSoft, Lawson, etc.
  - Databases systems such as Microsoft SQL Server, Oracle, and DB2
  - Analytics software such as Alteryx, Excel, Access, PowerBI, etc.
- Normalized data for internal use using MS Excel, Access, and Structured Query Language (SQL) Server.
- Improved internal processes using Visual Basic for Applications (VBA), Python, and PowerShell scripts.
- Prepared various analytical reports for executives using Excel and created dashboards using PowerBI.

### AlphaVu, LLC | Washington, DC | Software Engineer

June 2016 – Dec 2016

- Designed and implemented backend features of a Python Django web application for social media analytics.
- Improved performance of scalable, real-time data collectors in Heroku, without affecting the budget.
- Improved website throughput by 80% and eliminated 503 errors, with RabbitMQ and Heroku server scaling.
- Led adoption of JIRA for enabling agile methodologies, such as ticketing, sprints, and scrum meetings.
- Elicited and coordinated technical requirements between stakeholders and remote front-end developers.
- Ensured smooth deployment of new data collection features on Heroku and Amazon Web Services (AWS).

**IT @ Johns Hopkins | Baltimore, MD | Technology Intern**

Sept 2015 – May 2016

- Developed enterprise-level solutions for departments across all Johns Hopkins Institutions.
- Created features for a faculty networking Salesforce app, to facilitate work on new interdisciplinary grants.
- Transformed faculty data from Salesforce for a federated search engine using Apex, SOQL, and VIVO.
- Prototyped a PDF topic extraction solution using Tesseract Optical Character Recognition (OCR), Docker, and Gensim.
- Collaborated with interns and professionals using Agile methodologies, Git, and JIRA.

**JHU Center for Language & Speech Processing | Baltimore, MD | Research Intern**

May 2015 – Aug 2015

- Worked with a global team of interns and post-docs on research into state-of-the-art Machine Translation.
- Adapted another research team's loose, under-documented Java functions into a standalone JAR file.
- Debugged legacy Python scripts and wrote new ones to transform large datasets for further processing.
- Coded Bash scripts to automate algorithm processes according to academic paper specifications.

**JHU Student Technology Services | Baltimore, MD | Web Developer**

Sept 2013 – May 2015

- Leveraged the Drupal CMS to add website features quickly, such as forms, a database, and asynchronicity.
- Led the development of a website to accept lyrics and recording submissions for the new school song.
- Gathered project needs, wrote documentation, developed back-end modules, and designed a mobile-friendly front end.

**EDUCATION | CERTIFICATIONS | TRAINING**

---

Bachelor of Science, Computer Science | Johns Hopkins University (JHU), Baltimore, MD

2012 - 2016