Sean Erfurt

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SENIOR DATA ENGINEER

Skilled developer 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 knowledge of Agile methodologies, and experienced in contributing to cross-functional, distributed teams. Proven record of adapting to new systems, as well as finding ways to increase their 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, SOQL, Neo4j, 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, ElasticSearch, PyTest, VIVO, Git, Gensim
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, Git, 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

- Provided data extraction services to a wide range of industries using varied data sources including:
  - Enterprise Resource Planning (ERP) systems like SAP, Oracle, JD Edwards, PeopleSoft, Lawson, etc.
  - Database systems such as Microsoft SQL Server (MSSQL), Oracle, and IBM DB2.
- Loaded, normalized, and analyzed extracted data for tax savings, and prepared findings in standard deliverables.
- Improved internal processes using Visual Basic for Applications(VBA), Python, and PowerShell scripts.
- Prepared reports for executive decision-making using analytical software such as Alteryx, Excel, Access, and 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).

EDUCATION

Bachelor of Science, Computer Science | Johns Hopkins University (JHU), Baltimore, MD   2012 - 2016

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INTERNSHIP EXPERIENCE

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, SPARQL, 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 disparate, 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, from end-to-end, that accepted community submissions for a new school song.
- Gathered project needs, wrote documentation, developed backend modules, and designed a mobile-friendly frontend.

LEADERSHIP AND VOLUNTEER EXPERIENCE

Sigma Chi @ Johns Hopkins | Baltimore, MD | Assistant Chapter Advisor May 2016 – May 2017
- Provided mentorship, both personal and professional, to the undergraduate members of the chapter.
- Guided the chapter in planning their goals and strategies for the upcoming academic year.
- Goals we ultimately achieved include:
  o Recruiting a pledge class larger than the exiting senior class. We achieved net growth of 2 members.
  o Improving campus relations by co-sponsoring charity events with student clubs and sororities.
  o Reducing our outstanding dues balance by over 20%.

Sigma Chi @ Johns Hopkins | Baltimore, MD | Recruitment Chair May 2015 – May 2016
- Attended a fraternity-sponsored 3-day intensive course in leadership skills and recruitment techniques.
- Trained other brothers on the recruitment techniques I learned, via a seminar and role-playing exercises.
- Planned logistics for various recruitment events, and coordinated tasks I delegated to my direct reports.
- Led the fraternity to bidding 18 prospective brothers, 14 of which were admitted to the chapter, a net growth of 6.

Sigma Chi @ Johns Hopkins | Baltimore, MD | IT Chair May 2014 – May 2015
- Owned the project of modernizing our website from end-to-end, improving our campus outreach efforts.
- Found low-cost hosting and domain registration solutions, then set up the WordPress installation.
- Researched and provided plugins and themes to meet the needs identified by the fraternity committee.
- Configured plugins for: SEO, Google Analytics, Improved XML Sitemaps, Caching, and Social Media Sharing.
- Modified a free theme to responsively display the header and footer in a mobile-friendly way.
- Wrote documentation and manuals to help future admins and WordPress Authors add new features and content.

AWARDS

Bloomberg Scholarship | Johns Hopkins University | Baltimore, MD 2012
- A need-based full-tuition grant to undergraduate students with outstanding academic ability and potential.

National Merit Scholarship Finalist | Trinity HS | Euless, TX 2012
- Awarded to students who demonstrate exceptional leadership skills and academic achievements (ACT score of 35).