

# Zachary Schumacher

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University of Kansas

BSB Information Systems Technology, Concentration in Business Analytics

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As a software engineer with demonstrated experience in **Software Engineering and Data Warehousing**, I can provide value through my expertise in Python, SQL (Oracle, MSSQL, Postgres, IBM Netezza), Business Intelligence, Informatica and SSIS.

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## Experience

### Quest Analytics

#### Software Engineer (Kansas City, MO)

*June 2019 – Present*

- Contributing member of the R&D team, to research and develop processes to enhance our data pipeline
- Build and maintain services using Python (Flask, Django, Celery, PySpark)
- Laying ground work for streaming data in real time using Kafka and Spark
- Lead engineer on high priority project to rewrite service we sell directly to clients

### SelectQuote Insurance Services

#### Python Data Engineer (Overland Park, KS)

*January 2019 – June 2019 (Contract)*

- Build and maintain restful web services using Python and Flask
- Dockerizing microservice architecture using docker-compose
- Asynchronous task processing using Redis and Celery
- Work closely with data scientists to integrate predictive and optimization models into web services to optimize bidding on leads from external vendors.
- Integrate service with external web APIs such as Google AdWords to optimize money spent on advertising
- Increased uptime of machine learning services **from ~75% to 98%** by refactoring and making code stability changes.

### American Century Investments

#### Senior Programmer/Analyst (Kansas City, MO)

*June 2018 – January 2019*

- Leveraging Python, automated many file processing task flows; in one instance, reduced critical stock rating process from a two day manual effort to a 20 second automated script
- Built Python deployment pipeline using Jenkins and Docker
- Led effort to rewrite legacy web CRUD screens using Python/Flask
- Day to day support of production environment, including large Java code base, Python automation scripts, Oracle data warehouse powered by Eagle Pace, and custom web applications
- ETL development using a combination of Java, Informatica, Tibco Business Works, Python and Oracle PL/SQL procedures
- Enterprise scheduling using UC4
- Utilization of agile project management methodologies

## American Century Investments (cont.)

### SQL/ETL Developer (Kansas City, MO)

February 2018 – June 2018 (Contract)

- Wrote Python application to query Salesforce objects and write the output to json. Empowered the team to load the data with “schema on read” and eliminate downtime due to object schema changes; **saved the company ~\$45,000 a year** by removing need to license Informatica’s Salesforce connector
- Wrote Python backend for a business rules engine that would take user input and parse it to executable SQL statements
- Python automation with hook into Informatica to automate repetitive ETL development processes
- Built company’s first graph database using Neo4j and Python
- ETL development with Informatica and Netezza procedures
- Enterprise scheduling with UC4
- Utilization of agile project management methodologies

## Amsted Rail

### Business Intelligence Developer (Overland Park, KS)

June 2016 – February 2018

- Built email scheduling app using Flask to address Tableau’s gap in email report distribution; **saved ~\$50,000** due to reduced license need.
- Using Python, wrote ETL with SAP Business Objects restful API to move user defined reports into the data lake for consumption by data scientists.
- Using Python, built data pipeline into PTC ThingWorx’s predictive analytics engine to empower data scientists to build business facing predictive models.
- Built and maintained SQL data warehouse for five plant’s shop floor, including all data marts and ETL processes.
- Built data lake using SQL Server Transactional Replication and Python for data scientists use.
- Integrated data from home grown systems, WonderWare Manufacturing Execution System (MES) and SAP ERP.
- Served as company’s subject matter expert for plant data analysis using Tableau and MiniTab for statistical process control.
- Architected and administered company's Tableau environment (Desktop, Server and Mobile).

### IT Support Specialist (Overland Park, KS)

June 2012 – June 2016

- IT audits
- Microsoft Exchange management
- VM Ware experience
- Built IT security awareness webpage and heavily involved in IT security awareness program
- Active directory management
- Lead on project to migrate reporting off SSRS and legacy systems to Tableau

### IT Help Desk Technician (Granite City, IL)

January 2012 – June 2012

- General IT support including programming smart scanners, telecom, hardware and software both onsite and off.

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## Competencies

- Using Python for task automation and scripting
- Using Flask for development of web applications
- Using Flask for development of restful web services
- Using Docker and Jenkins for continuous integration
- Supplementing Python services by offloading long running tasks with Celery
- T-SQL and PL/SQL stored procedures

## **Competencies (cont.)**

- HTML, CSS, JavaScript/jQuery basics
- Jinja2 templating engine
- Version control with subversion and git
- Data warehousing – Oracle, SQL Server, IBM Netezza, Postgres
- ETL – SSIS, Tibco Business Works, Informatica, Java/Spring, Python