

# Benjamin Echelmeier

U.S. Citizen

## Summary:

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Flexible software developer and problem solver passionate about solving weedy problems. Skilled in Python, and also capable of solving DevOps, virtualization, and technical writing and project management. Familiar with building modern, scalable apps and APIs as well as working with legacy systems. Enjoys working closely with clients and colleagues to resolve complex requirements; committed to building lasting solutions to solve real problems.

anguages:	Experience
Python	6
• SQL	4
<ul> <li>Bash</li> </ul>	5
• CSS	2
<ul> <li>Javascript</li> </ul>	2

# **Education:**

- VMware Cloud (VMC) on AWS Master Specialist badge (2022)
- Bachelors in Mathematics at Hannibal LaGrange University (2015-2019)
- Lafayette Co C-1 High School (2011-2015)

# **Projects:**

ERP Disaster Recovery Consultation

(March 2024-June 2024)

- Collaborated with a large corporation to design, document, and evaluate disaster recovery plans and standards
- Led a team engaging with more than thirty sites across four continents to document existing disaster recovery policies
- Provided detailed ratings of sites with specific remedial action steps across numerous sites.



(October 2023 – March 2024)

- Python Web App Development Support
  - > Created testing framework for Postgres database mocking
  - Worked as a team to establish and enforce cleaner Python standards
  - Designed and implemented significant refactor for a legacy SQL pattern to increase both readability and speed
  - Built an plan and estimate for rebuilding a application in Python from legacy documentation and code
- Security Breach Project Management Augmentation (December 2023)
  - Worked alongside a large technology company to document and communicate remediation efforts
  - > Provided support and ensured coverage in a large-scale, fast paced environment
- Salt Stack/Aria Automation Config Consult (July 2023 September 2023)
  - Explored viability of Salt and Aria Automation Config to meet customer requirements inside VMWare environment
  - > Built sample customer environment to create and demo proof of concept
  - Identified and reported critical shortcomings or the requested technical stack to meet actual requirements
  - Identified and wrote proposal for an alternative VMWare solution designed to meet customer needs, including an implementation strategy
- CAD Render Automation

(April 2023 – July 2023)

- Explored and documented technical requirements and capabilities of Keyshot rendering software and associate scripting api
- Developed and tested varied methods for expanding capabilities for script based Keyshot implementation
- Designed and implemented Python framework for specific and flexible inter-process communication





- Pipeline Database Procedure Translation (February 2023 May 2023)
  - Extracted business logic from MicrosoftSQL stored procedures into a python api
  - Lead a team in python SQLAIchemy and associated database management conversion best practices
  - > Architected and developed a environment, database, and api framework
- Security Requirement Parsing (November 2022 February 2023)
  - Designed and implemented an application to read and categorize various technical security documents, including CIS and STIG
  - Scraped and organized semi-structured security instructions from xlsx and xml files into organized requirements
  - Developed text-analysis tools generate requirements from technical text supplemented with broader descriptions
- Salt Compliance Generator

# (January 2023 - April 2023)

- > Designed an intermediate DSL for summarizing various infrastructure requirements
- Architected framework to consume data within this specification and generate robust Salt states, including complex requisites and expansive jinja logic
- Led a team of developers to further expand scope of both specifications and state generation
- > Developed and demonstrated POC for key partners and clients
- > Developed python module for generating complex regex for numerical comparisons

# OpenSCAD Modeling (November 2022 – March 2023)

- Modeled a variety of household objects for 3D printing in OpenSCAD
- Tested various iterations to improve subsequent designs
- > Designed models with dynamic variables to address multiple needs from a single model
- VMware Datacenter Virtualization

(June 2022 – October 2022)

- Developed POCs to showcase various vCenter features, including HA, vMotion, and data-redundancy.
- Installed and configured ESXi hosts on OVH cloud
- Installed and configured vCenter server on OVH cloud





Terminal Labs Editor

(July 2022 – November 2022)

- Edited and recomposed contract proposals  $\succ$
- Edited and recomposed technical documentation and blogs, converting technical jargon  $\succ$ to allow broader consumption
- Composed and diagramed architectural proposals  $\succ$
- $\succ$ Updated and maintained content
- $\succ$ Implemented mild and moderate UI updates to the TL webpage
- Electronic Data Interchange MVP (December 2021 – June 2022)
  - Analyzed Market feasibility and developed a competitive development plan  $\succ$
  - Architected and designed a toolset proposal for the new market application  $\succ$
  - Targeted and identified key market openings and opportunities  $\succ$
  - $\succ$ Researched and compared Flask and FastAPI
  - Parsed and translated between various data languages, including JSON, YAML,  $\succ$ TOML, and EDI standards
  - Ensured compliance with existing EDI specifications, models, and industry standard  $\succ$ best-practices
  - As team lead, onboarded and instructed additional developers  $\succ$
  - Developed a new REST API using fastapi with a CRUD design philosophy  $\succ$
  - Implemented an EDI data translation layer to a modular JSON schema  $\succ$
  - Diagrammed and crafted transaction workflows for an MVP  $\succ$
- Bash Environment Package Manager

 $\succ$ 

- (November 2021 June 2022) Created documentation and analysis of existing packaging repository
- Refactored and updated code to fix existing bugs and expand functionality  $\succ$
- Reworked packaging structure and updated configurations to comply with modern  $\succ$ python specifications
- $\succ$ Documented and gave recommendations for existing competitors and future development





# VMware on IBM Cloud

# (March 2022)

- > Worked as a team to implement vSphere on IBM Cloud
- Performed troubleshooting of vSphere technologies
- Tested edge cases and simulated service-crashing scenarios

# EDI Consultation

# (September 2020 – December 2021)

- > Designed and implemented customer specific solutions to integrate with legacy systems
- Maintained and performed troubleshooting on EDI Systems
- Planned and executed systemic updated on legacy systems
- Interpreted and met business requirements in EDI Systems
- > Trained new technicians and overhauled internal documentation
- Performed market research and analysis for market gaps and opportunities

# ✤ AS2 Server

# (September 2020 – March 2021)

- Compared market solutions and discussions for AS2 solutions
- > Created MVP for system-agnostic cloud-based AS2 Server using Django
- Implemented connection between trading partners, implementing test environments and certificates
- > Detailed implementation process for client internal documentation

# Data Scraping and Formatting

# (August 2020 - February 2021)

- > Troubleshooted semi structured data and related data scrubbing code
- > Validated end to end api call and display of transformed data results
- > Refactored and maintained lock step changes made from data scraping source
- > Improved project maturity for team based collaboration
- > Drastically expanded test coverage for new and existing code
- > Implemented type hinting throughout repository to assist future code expansion





Cloud Provider Evaluation

(May 2020 – July 2020)

- Implemented serverless deployments on each of the major cloud providers
- > Created a POC for running python scripts on AWS Lambdas
- > Created a POC for running python scripts on Azure Functions with
- > Created a POC for running python scripts on Google Cloud Functions
- initialized POCs with CI/CD pipelines in both Azure and Google Cloud





# **Tools & Applications:**

## **Python Utility:**

- BeautifulSoup4
- Black
- Click
- Flake8
- Муру
- Pathlib
- Poetry
- Pydantic
- Pytest
- Requests
- Setuptools
- SQLAlchemy
- tomlkit

#### VMware:

- vSphere
- NSX
- vCenter
- VMC on AWS
- Aria Automation Config

## **Operating Systems:**

- Ubuntu
- RHEL
- CentOS
- Windows

## Security Standards:

- STIG
- CIS

## Web Frameworks

- Django
- Flask
- FastAPI
- Uvicorn

## **DevOps:**

- Salt (open-salt)
- Vagrant
- Terraform
- GitHub actions
- Azure Pipelines

## **Package Managers:**

- yum
- dnf
- apt
- snap
- pip
- Conda
- Poetry

## 3D Modeling/Game:

- Unreal Engine
- Blender
- Keyshot
- Openscad

## Graphic Documentation:

- draw.io
- GIMP

## **Database Systems:**

- PostgreSQL
- MySQL
- SQLite

## **Providers:**

- AWS
- Virtualbox
- GCP
- Azure
- IBM Cloud

## **Conference Software:**

- Google meet
- Zoom
- Discord
- MS Teams
- Skype

## **Version Control:**

- Github
- Git
- Gitlab

## Markup Languages:

- HTML
- TOML
- YAML
- JSON

## **IT Utilities:**

• OpenSSL

