

Katherine Kemp

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EDUCATION

UNIVERSITY OF MARYLAND

BS IN COMPUTER SCIENCE

May 2022 | College Park, MD

BS IN MECHANICAL ENGINEERING

May 2022 | College Park, MD

Minor in Innovation and Entrepreneurship

Gemstone Honors College Citation

Omicron Delta Kappa

Tau Beta Pi

Banneker/Key Scholar

Kappa Theta Pi

Celtic Grace Irish Dance Troupe

Dean's List

GPA: 3.95 / 4.0

UNIVERSIDAD CARLOS III

Jan - Jun 2020 | Leganés, Spain

LINKS

Personal:// katherinekemp.com

LinkedIn:// [katherineekemp](https://www.linkedin.com/in/katherineekemp)

GitHub:// [katherinekemp](https://github.com/katherinekemp)

TECHNICAL SKILLS

LANGUAGES

- Python
- Java
- TypeScript
- MATLAB

TOOLS

- Git
- AWS (Lambda, Step Functions, DynamoDB, SNS, SQS)
- Emacs

SOFT SKILLS

- Customer Support
- Written & Oral Communication
- Remote Work
- English (Native)
- Spanish (Intermediate)

WORK EXPERIENCE

CLOSE | CUSTOMER SUPPORT ENGINEER

April 2024 - Present | Remote

- Provide in depth custom support for the Close CRM by answering API questions and writing custom scripts in Python

AMAZON | SOFTWARE DEVELOPMENT ENGINEER

Oct 2022 - Mar 2024 | San Diego, CA

- Deploy and test the worldwide expansion of infrastructure for pre-order fulfillment abuse prevention measures in AWS projected to save \$80M annually
- Modify an existing system design to support multiple languages and conform to GDPR laws for European marketplace launches
- Write a custom JSON deserializer to flatten complex Java objects into a storable format for use in ML models
- Write an integration test framework for an asynchronous event processor
- Diagnose and respond to problems with order processing during Prime Day
- Lead an investigation of a high severity issue impacting 11,000 customers during Prime Day in order to avoid further customer impact during peak traffic
- Write unit tests and run manual integration tests in order to ensure proper behavior of new abuse prevention measures on Amazon.com
- Update dashboards and documentation to monitor and maintain service health
- Implement custom cache metrics in CloudWatch for AWS Lambda

STOCK AND FUND SCREENER | FREELANCE SOFTWARE DEVELOPER

Jan 2023 - Aug 2023 | Washington, DC

- Develop a Python GUI to trade stocks based on desired metrics using Yfinance, Pandas, Tkinter, Matplotlib, and other tools
- Collaborate with clients to design a custom system with their desired features
- Perform quality assurance testing on calculations for technical indicators

MPR ASSOCIATES | CO-OP ENGINEER

Aug 2020 - Jan 2021 | Alexandria, VA

- Automated data analysis of simulated nuclear accident scenarios using Python
- Implemented custom setting selection on a Python GUI using Tkinter widget
- Automated verification and validation procedures for thermal hydraulics code with end-to-end tests using Pytest

PROJECTS

SEMI-AUTOMATED HYDROPONICS SYSTEM FOR BEGINNERS

Feb 2022 - May 2022 | College Park, MD

- Used Raspberry Pi GPIO to measure water conductivity with a voltmeter and water height with an ultrasonic sensor
- Displayed data on a live updating GUI using Tkinter and alerted users to plant conditions with text updates through Twilio

PREDICTING STOCK PRICES WITH REDDIT COMMENTS

Nov 2021 - Dec 2021 | College Park, MD

- Scraped data from Reddit using Pushshift API and Yahoo Finance
- Generated linear regression models and visualizations for stock price vs. company mentions on r/wallstreetbets using Pandas, Matplotlib, and SciPy