





# Kleia LaRoe

## Software Engineer

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### Relevant Experience

#### Software Engineer @ Shelter Insurance

March 2019 – Present Columbia, MO

- Implement high quality code in an agile, test-driven development environment using automation and best practices.
- Work with cross-functional agile teams to collaborate, educate, and learn from Product Owners, Scrum Masters, and Business Stakeholders.

#### Accomplishments

- Learned how to and implemented an infinite scrolling feature for a photo viewing service that is used by agents in the field.
- Helped with implementing a new rate plan that gives a more accurate rating for customers based on previous history.
- Helped with handing over and educating a new agile team about a couple of applications that my team oversaw.

#### Research Assistant @ University of Missouri

June 2016 – Aug. 2018 Columbia, MO

- Analyzed 3-dimensional data to extract features, train and test models, and give a baseline of accuracy to compare against.
- Presented results and findings on a weekly and semesterly basis with United States Military and other contractors.

#### Accomplishments

- Presented paper at SPIE convention about effectiveness of Hidden Markov Models being able to detect a sequential sequence for explosive hazards.
- Hand labeled data that was used as a human baseline for testing and comparing models against

### Publications

#### *Detecting explosive hazards in 3D radar imaging through clustering and sequential learning*

Apr. 2018 • Proc. SPIE 10628 • Detection and Sensing of Mines, Explosive Objects and Obscured Targets XXIII • Orlando, FL

### Skills

#### Programming Languages

Java, JavaScript, HTML, Python, SQL, CSS, C++, Typescript, XML

#### Libraries & Frameworks

jQuery, RabbitMQ, AngularJS, Bootstrap, Spring, PyTorch, scikit-learn, Keras

#### Tools & Platforms

Git, MATLAB, Gradle, Jenkins, Postman, JIRA

### Education

#### University of Missouri

2017-2018, Columbia, MO  
Master of Science, Computer Engineering

2011-2016, Columbia, MO  
Bachelor of Science, Electrical and Computer Engineering  
Minors in Computer Science and Mathematics

### Projects

#### Studying SARS-CoV2

Modeling the rate of infections, hospitalization, and mortality in the United States and compared them to other countries. Data was pulled in from Johns Hopkins daily and plotted.

#### Finding Volcanoes on Venus

Class project that used semi-supervised Convolutional Neural Networks to identify volcanoes on Venus. The results were compared to a supervised model that was found in Kaggle as a baseline.

### Interests

Magic: the Gathering, Dungeons & Dragons, Crocheting, Cooking, Traveling