

Sajia Zafreen

Boise, ID (208)-703-9643

sajiazafreen@u.boisestate.edu - LinkedIn: [in/sajiazafreen](#) - git: [github/zafs23](#)

Software Engineer Intern

Strong knowledge of theoretical computer science. Skilled in object-oriented programming (Java, Python) and implementing data structures, experienced in software development using scrum methodologies (agile development cycle). Interested in the backend, full-stack software development, and common design patterns. A proven track record of technical problem-solving, teamwork, excellent interpersonal, verbal, and written communication skill.

Programming Languages	Testing	Tools	Machine Learning
Java, Python, C, HTML, CSS, PHP, JavaScript, jQuery	CI/CD, Test-Driven Software Development, Travis, Unit testing, Integration Testing,	Eclipse, MySQL, Git, Git Kraken, VS code, Latex, Vagrant, VMware, Docker, Maven, phpMyAdmin, Workbench, XAMPP, Heroku	TensorFlow, Keras, Scikit-learn, NLTK, NumPy, Pandas

EXPERIENCE

Teaching Assistant, Boise State University - Boise, ID

08/2018 to Present

- Lab syllabus preparation to add more focus on cyber-security for approximately 300 students.
- Participate in a problem-solving group discussion to organize and provide structure to the lab activities.
- Work in a team under the lead TA's supervision to keep consistency between the lab and the lecture.
- Maintain the course's social media page to spread awareness about conservation and usage of energy.

Research Assistant, Boise State University - Boise, ID

10/2019 to 06/2020

- Recreated SNAP project to better understand the Social Network construction and information flow by implementing unsupervised algorithms using *Graphviz*.
- Find patterns from different data scopes using appropriate machine learning algorithms on user behavior regarding privacy and data security.

EDUCATION

BS in Computer Science, CGPA: 4.00

12/2021, Boise State University, Boise ID

PROJECTS

Bioinformatics

- Designed, Coded, and Tested the implementation of BTree with Cache to reduce memory usage on DNA pattern recognition by determining the human genome's structure and meaning.

Git-Time-Lapse View

- Enhanced git-time-lapse view project by adding new features and unit testing implementing peer-review and Scrum methodologies of CI and CD.

Sajia Zafreen

Boise, ID (208)-703-9643

sajiazafreen@u.boisestate.edu - LinkedIn: [in/sajiazafreen](#) - git: [github/zafs23](#)

Interface to MySQL Database

- Implemented a command-line utility that interfaces with MySQL database implementing basic SQL queries, including prepared statements.

Natural Language Processing

- Implemented Parts of Speech Tagger as a Hidden Markov Model
- Using TensorFlow and Keras, built a Neural Network for an NLP task using a multilayer perceptron for Topic Modeling.
- Using a Pre-Trained Model (VGG19, InceptionV3), trained and evaluated a classifier to detect one type of image.

TacoCaT:

- Designing and implementing a novel user-centered web application interface for students in 4th-6th grade interactively to help them keep track of deadlines by completing and submitting assignments or tasks, time management for scheduled meetings, and class breaks during the day.
- Practiced user interface task analysis by validating the tasks to select key users and implementing a working prototype using UXpin.

We Help Us

- Designed and implemented a website to help people for support groups.

Intro to Operating Systems

- Implementation of a simplified command shell akin to the Linux shell using C.

COMPETENCIES & SKILLS

Natural Language Processing, Neural Network, Logistic Regression, Supervised/Unsupervised Learning, Data Structure, and Algorithms, Web Development, Software Development, Database System Usage, Human-Computer Interaction, Interface design, visibility, affordances, mapping, feedback, consistency application of applications, Fitts's Law, Schneiderman's eight golden rules, Git Version Control, Agile Methodologies, Scrum Development Process, Microprocessor, Engineering Statistics, Verilog, VHDL, FPGA.

SCHOLARSHIPS

- Kount Ada Lovelace Computer Science Scholarship
- Hutchison Computer Science Scholarship
- Thelma Brown Engineering