SHIVANSH AGGARWAL

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EDUCATION

University of Wisconsin-Madison Expected: May 2024
Bachelor of Science, Computer Science, Data Science, Mathematics
GPA: 4.0 (Dean's List all semesters)

Related Courses: Data Science Programming, Data Modeling, Algorithms, Computer Vision, Differential Equation, Machine Organization and Programming, Matrix Linear Algebra, Calculus II

TECHNICAL SKILLS

Programming Languages: Java, C, C++, R, Python, JavaScript, SQL, HTML/CSS

Tools/Technologies: AWS, MATLAB, Node.js, API, Scikit-Learn, Keras, Jupyter Notebook, GCP, MongoDB, IntelliJ, Visual Studio Code, PyCharm, Git, Postman, Django, Flask, UiPath

Certifications:

- **AWS cloud practitioner**, Amazon Web Services June 22
- **Data Science and Machine Learning**, Coding Ninjas Aug 21
- **Front End and Back End Web Development**, Coding Ninjas Jan 21

EXPERIENCE

Jefferies, IT Summer Analyst – Cloud Team June 22 - Aug 22

- Worked with the cloud engineering team to develop applications using EC2, Lambda, S3
- Developed RPA bot using UiPath, Splunk, Palo Alto to automate network deny requests
- Built a charity auction website for company with other interns using ServiceNow platform

Undergraduate Teaching Assistant – CS 320: Data Programming II Sep 22 - Present

- Hosting weekly office hours to assist students with debugging code and resolving doubts
- Developing study materials and videos to help students understand complex concepts
- Leading weekly labs and reinforcing learning skills through short assignments and quizzes

MSC Computer Vision Group (Dr. Vikas Singh) Feb 22 – Present

- Working on developing a method to generate heatmaps for Alzheimer patients' brain scans
- Using ADNI dataset to get the MRI scans for training neural network on 3D images
- Using different ImageNet models like VGG, ResNet and converting them for 3D input data

Informatics Skunkworks (Independent Study) Feb 22 – Present

- Developing a novel method to have confidence interval for predictions of a ML model
- Using material science datasets like Diffusion, Superconductor to train our model
- Testing the method with the help of statistical metrics like R^2, RMSE, and QQ plot

PROJECTS

Methane Emission Analysis Apr 22 – May 22

- Applied linear regression model and did hypothesis testing on the data using RStudio
- Predicted methane emission for 2022 using the prediction interval formula in statistics

Helping Hands Nov 21

- Built a ML model using NLP to predict whether a person is having suicidal thoughts or not
- Developed a web interface using Flask with real time emailing of the prediction to doctor
- Won the most popular project award in hackathon organized by Data Science club

Chatting Engine Summer 21

- Developed an online website using Node.js and NoSQL for blogging and creating friends
- Added additional features like Google sign in, commenting and liking posts

InstaBot Summer 21

- Built a bot using Selenium to send follow requests to most followed pages based on search
- Added additional features like checking story, extracting followers list, and liking top posts

Survival Game Nov 20 – Dec 20

- Built a survival game where player must find food, water, and shelter to survive in 20 steps
- Used Java programming language for the implementation

Shop Manager Jan 20 – Feb 20

- Built a platform for checking the inventory of a shop and calculating discounted prize
- Used Python for creating the back end and front end of platform and SQL for database