

## Ashley King

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**SUMMARY** Diligent problem solver with hands-on experience in CI/CD environments. | Demonstrated knowledge in Python, Java, C/C++, C#, and SQL | Skilled with Machine Learning and Data Mining techniques | Over 2.5 years of internship experience

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### EDUCATION

North Carolina State University, **Master of Science: Computer Science** May 2023  
Participated in AI Club and WICS (Women in Computer Science)  
Courses: Auto Learning Data Analysis, Software Engineering

Appalachian State University, **Bachelor of Science: Computer Science** May 2021  
Graduated Summa Cum Laude with a 3.96 GPA and Departmental Honors  
Courses: Graduate Data Mining, Graduate Advanced Machine Learning, Database, Data Acquisition and Visualization, Operating Systems

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### TECHNICAL EXPERIENCE

**Graduate Intern** | SAS Institute May 2021 – Current

- Part of a QA team which collaborated in an agile environment with architects and DevOps to identify areas of improvement and test cases, and develop best practices
- Decreased running time and error by containerizing projects and integrating with Microsoft Azure
- Projects implemented using Git, Jenkins, Python, Docker, and Azure

**Year-Round Cyber Test Engineering Intern** | SAS Institute Oct 2020 – May 2021

- Automated cases and reduced overall running time of test suites using Cypress
  - Created Jenkins jobs to build, execute, and destroy containerized tests
  - Projects implemented using Git, Jenkins, Docker, JavaScript, Azure, and Cypress
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### PROJECTS

**Research - Undergraduate Honors Thesis:** Completed an undergraduate honors thesis titled "Poisson Matrix Factorization for T.V. Recommendations". Introduced Poisson Matrix Factorization into a Python Recommendation library, and successfully built and tested a Recommendation System with a FCP score of 0.70

**Data Science and Machine Learning - Redfin Housing Analysis:** Utilized Python to scrape, visualize, and build Machine Learning models based on Redfin housing data with an average MSE score of \$100K.

**Reinforcement Learning - Cart Pole and Acrobot:** Utilized Python to build PyTorch Reinforcement Learning models using Open AI environments. For Cart Pole, the agent was able to successfully balance a pole on a cart for 200 turns 97.5% of the time. For Acrobot, the agent was able to successfully maneuver a pivot point above a threshold in 95 turns.

**Data Science and Machine Learning – Classifying Parkinson’s Disease:** Used Classification Techniques to identify if a patient had Parkinson’s Disease based upon speech pattern data. Using Random Forests and Python, a test accuracy of 86% was achieved

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### TECHNICAL SKILLS

Programming Languages	Python, C, JAVA, C#, JavaScript, SQL, R
Database	MySQL 5, SQL, Postgres
Others	AWS, Selenium, Visual Studio, Git, PyTorch, Jira, Bitbucket, Jenkins, Azure