Hannah DeFazio

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PROFESSIONAL EXPERIENCE

SOFTWARE ENGINEER, MACHINE LEARNING | RED HAT
June 2024 - present | Raleigh, NC

- Spearheaded the implementation of a critical pause-and-resume feature for Kserve models, enabling more efficient resource management and cost savings
- Engineered critical stability and observability features for new LLM-D inference services by implementing robust API schema validation and aggregating backend pool statuses, which simplified debugging and enabled reliable automation
- Resolved numerous high-impact bugs and CVEs, enhancing product security and stability across multiple releases
- Authored and maintained essential documentation for complex processes, including source synchronization, upstream release procedures, and local end-to-end testing, improving team efficiency and onboarding
- Developed and executed a new branch strategy for the team's repos, improving the development workflow and release process

RESEARCH AND DEVELOPMENT ENGINEER | KITWARE, INC.
May 2020 - May 2024 | Carrboro, NC

- Head programmer and scrum master on the DARPA PTG Kitware team
- Contributed to Kitware's open-source platforms (KWIVER, SMQTK, Girder) on the Computer Vision team
- Handled machine learning experiments; Presented and documented results for evaluation with the team
- Integrated machine learning models into our ROS system for real-time deployment and testing
- Containerized and integrated disinformation analytics into APIs for evaluation on the DARPA SemaFor project
- Led the code review process on multiple teams, including teaching new interns about best software practices, the code review process, and agile development as the Intern Team Leader

RESEARCH

TARS, TERASCALE ALL-SENSING RESEARCH STUDIO
October 2017 – May 2022 | Clarkson University

- Developed tools to allow the allocation of nodes in a drone cluster to be determined by hardware quality and additional resources such as cameras [M.S. Thesis]
- Led a multidisciplinary 7 person team on creating the hardware and software architecture of an assistive robot prototype [Honors Thesis]
- Performed system integration to demonstrate that the prototype robotic arm could be controlled based on whether a person was predicted to need assistance

LEADERSHIP

SCRUM MASTER | RED HAT
January 2025 - present | Raleigh, NC

- Expertly managed the team's agile framework by facilitating all scrum ceremonies, overseeing the entire Jira sprint lifecycle from planning to reporting, and authoring weekly leadership updates
- Drove significant process improvements by introducing mini-refinement groups, creating clearer Ready/Done checklists, and developing a workshop on writing effective impact statements to enhance team communication and efficiency

EDUCATION

CLARKSON UNIVERSITY

M.S. Computer Science
May 2022 | Potsdam, NY

- **Summa cum laude**

B.S. Computer Science Minor in Mathematics
May 2020 | Potsdam, NY

- **Honors Program**
- **Magna cum laude**
- Presidential Scholar (Fall '19, Spring '18, '20)
- Dean's List (Fall '17, '18)

SKILLS

PROGRAMMING LANGUAGES
Golang | Python | C++ | Docker | CMake

SOFTWARE EXPERIENCE
Kubernetes | Openshift | Robot Operating System (ROS) | SLURM | Overleaf/LaTex | Git/Github | UNIX/Linux

TECHNICAL EXPERIENCE
Software Engineering
Open Source Development
Agile Development
Artificial Intelligence
Containerization

HONORS

National Grid Stipend for Research Opportunities in Sustainable Energy

Honorable Mention Poster Presentation in Computer Science and Engineering at Research and Project Showcase (RAPS)

ADDITIONAL LEADERSHIP
Kitware's PTG Team's Scrum Master
Kitware's Intern Team Leader
TARS Research Team Leader
Resident Advisor
Honors Recruiter & Peer Mentor
Society of Women Engineers