University *of* Mary Washington

Student Learning Outcomes for Computer Science

1. Students will be able to solve computational problems using algorithms and data structures.
2. Students will be able to successfully use industry-standard programming environments in developing applications.
3. Students will be able to analyze, design, implement, and document computer-based systems that satisfy specifications.
4. Students will be able to analyze and compare alternative solutions to problems and systems.
5. Students will be able to capture, digitize, represent, organize, and transform data such that it can be used efficiently in computations.
6. Students will be able to work effectively on a team to develop quality software and systems.
7. Students will be able to communicate effectively in both writing and speaking in a professional context.
8. Students will be able to recognize and apply the social, ethical, and security responsibilities of computer scientists.
9. Students will understand that continuous learning is fundamental for computer scientists and articulate the learning strategies that are most effective for them.
10. Students will articulate their interests, skills, and strengths related to their professional identities.