Non-Thesis M.Sc. Student Portfolio Guidelines

Department of Computer Science

Vanderbilt University

The portfolio is the principal artifact used by the department to document the performance of students enrolled in the non-thesis M.Sc. degree. This document is intended as a guide. Adhering to these guidelines is a requirement for graduation.

Portfolio Requirement

Every student in the non-thesis M.Sc. program in Computer Science is required to assemble and submit a portfolio for review to their academic adviser no later than one week prior to the end of the final semester. When the advisor is satisfied, they sign the cover page and transmit the portfolio to the DGS for consideration by the faculty.

Portfolio Content & Organization

Every student is required to prepare **a single PDF file** containing as much as possible of the information described below. For each major section, insert the appropriate section heading. All sections are required to be included.

1. Summary Data
    a. Personal information (name, date entered program, full or part time, principal source of support)
    b. Name of academic advisor
    c. Courses and Grades (course, semester taken or planned, name of instructor, grade received)
2. Statement of Professional Goals and Achievements
    a. Explain your professional goals
    b. Describe your achievements for the duration of your graduate studies
    c. Describe your interest in specific topic areas of Computer Science
3. Curriculum Vitae
    a. The CV should contain the following information: Academic degrees, professional employment, honors and awards, service, publications (if applicable), expert skills in computer science.
4. Knowledge and Mastery of Computer Science Concept – A student in the M.Sc. degree program in Computer Science must be able to demonstrate knowledge and mastery of computer science concepts.
    a. A student is expected to have the ability to apply computer science concepts in order to solve advanced problems. One artifact is required to demonstrate such ability. The artifact can be a course assignment or project. A publication or project report is what works best. The statement of the problem should be also included. The result of a team project is acceptable, but an explanation clarifying the student's contribution must be included.
    b. A student is expected to contribute substantially to significant software artifacts. One such

artifact is a required component for the portfolio. Include a copy of one such artifact which may contain requirements list, design documents, software documentation, and actual code. The actual source code should be in a **public GitHub repository** and the portfolio needs to include a direct link to it. Other relevant documents should be included directly in the PDF file.

5. <u>Communication Skills in Computer Science</u> – A student in the M.Sc. degree program in Computer Science must be able to communicate computer science concepts in an effective professional manner.

    a. One artifact is required to demonstrate the student's oral or writing communication skills. The artifact can be a project report or a presentation that was performed for a Computer Science course. If the student has participated in work that resulted in publications or presentations in technical conferences, the corresponding artifacts should be included with an explanation clarifying the student's contribution. A report, a publication or a slide deck are examples of this item. The document must be included directly in the single PDF file.

6. <u>Conduct Independent Inquiry in Computer Science</u> – A student in the M.Sc. degree program in Computer Science must demonstrated competence in the conduct of independent inquiry; compilation of a written account of such inquiry, its outcomes, and conclusions.

    a. One artifact is required to demonstrate the student's competence to conduct independent inquiry in computer science. Such an artifact should document work performed for a project in a Computer Science class, for an independent study class, or for a research project. The artifact must include all components that demonstrate the conduct of the inquiry such as problem statement, design and research methodology, project reports, and software artifacts. Actual source code should be in a **public GitHub repository** and the portfolio needs to include a direct link to it.

<u>For more information, you can contact:</u>

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