**CIS/CEN 4914 Senior Design Advisor Approval Form**

1. **Find a Team**
2. **Copy Form**
3. **Team leader should complete this form.**
4. **Team leader should give the completed form to your selected advisor for them to sign. Advisor should sign only ONE form per team.**
5. **Each team members upload a copy of the SAME form to register for the course here** [**Course Registration**](https://forms.gle/bXQsnpJmk4jTEXaF8)

**APPLICANTS**

Team Members

1. Tony Gupta
2. Ian Kreger
3. Michael Wong

Team Name: Team Tangible Interfaces

Brief description of project:

We are each joining Dr. Alexandre Gomes de Siqueira’s ongoing research, where he has grouped us together to work on a specific project (hence the approval form and subsequent application).

We will be researching a potential application of Tangible User Interfaces in Montessori learning environments, which encourages hands-on learning. We will take traditional alphabet blocks, which students freely arrange to form words and build their spelling/vocabulary skills, and turn them into a tangible input device for a computer that can recognize the words a student forms. The system can then output relevant information such as the pronunciation of the word, an image, and related sounds. For words that are not real, the application should still try to present the word, along with the best interpretation of what it may be (e.g., for the word ”catdog,” the system could show half an image of each stitched together). As it is a research project, development will include creation of the hardware—making the blocks using technologies such as 3D printing, determining how the computer should recognize the blocks, integrating a screen into a tabletop surface, etc.—as well as the software, and we aim to collect data about the device when compared to the traditional alphabet blocks. Further milestones that expand the project scope include development of and data collection on the efficacy of a VR recreation of this concept.

Computer languages you plan to use:

C#

Software packages/frameworks you plan to use:

Unity

**ADVISOR APPROVER**

Advisor name: Alexandre Gomes de Siqueira

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Advisor Department: CISE

Advisor Signature: 