

Connect to create: Multi-user, collaborative visual programming environment

Project description

Visual programming environments are designed to provide school-age children with introductory programming experiences. Although pair-programming methods are one approach used to engage learners in collaborative programming, collaboration is limited to one person using the computer at a time, as well as physical collaboration in the classroom. Further, online synchronous collaboration in visual programming environments is not currently supported.

This project aims to determine the ways in which multi-user, synchronous collaboration in online visual programming environments can be supported, including ways for children to engage in one project simultaneously and the support of activities relating to project management and communication. This project will draw on best practices in online collaborative learning and K-6 computer science education. This project provides opportunities for the development of software, as well as the testing of the effectiveness of software through usability experiments and/or data mining and analysis techniques.



We have available a number of PhD projects within this space, working collaboratively with our research team to:

- understand learning processes and behaviours within online learning environments,
- develop data analytics techniques and tools for learners and instructors, founded on education theory.

Student attributes

- You might have an interest in education and the design and development of tools for supporting education.
- You might be interested in usability/user-experience design.
- You might have an interest in data mining and data analytics.

More Information

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