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**Carl Toews\*** (ctoews@pugetsound.edu). *Using Jupyter Notebooks to Bridge the Path from Math to Code.*

There are a number of courses in the undergraduate mathematics curriculum that tend to attract both mathematics and computer science majors. “Discrete mathematics” as a stand-alone course is one, but others include optimization, modeling, and numerical analysis. A common tension in many of these courses is how to strike a balance between theory and computation: for non-mathematics majors, the underlying theory can be prohibitively complex, while for non-computer science majors, the programming overhead can be daunting. This talk reports on a recent series of classes in which open-source Python-based Jupyter Notebooks have been used to help mitigate this tension. The Jupyter Notebook allows executable code and typeset mathematical exposition to be embedded in the same document, tremendously streamlining the passage from exposition to code. Since Jupyter Notebooks also display code output, they make it easy for students to inspect, analyze, and modify their computational results, an essential workflow paradigm for harnessing the computer as an exploratory tool. Preliminary student feedback suggests that the Jupyter Notebook can be a powerful element around which to design classroom activities that appeal to both mathematics and computer science majors. (Received September 22, 2015)