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EDITORS' MESSAGE

Welcome to this final edition of *Inroads* for 2020. This has been a most unusual year for all of us, and we hope that you and your loved ones are safe and well.

In this edition we have a selection of interesting articles, a new feature, and of course the ever-reliable John Barr on the Backpage. This time John introduces us to some puzzles from the Harvard CS50 contest, so try your hand at these and see how many you can solve!

Our submitted articles in this issue address various aspects of computing education, including curriculum, pedagogy and professional development.

Cybersecurity is an increasingly important topic, and so Honggoo Kang and Sangjin Lee take us on a journey into the world of curriculum development for this area. This is particularly instructive due to the interdisciplinary nature of cybersecurity, and approaches like this are applicable to other aspects of computing education.

Suzanne W. Dietrich, Don Goelman, Jennifer Broatch, Sharon M. Crook, Becky Ball, Kimberly Kobjek, and Jennifer Ortiz relate their experiences with the development of formative assessment processes for database visualisations. This also has a multidisciplinary aspect, in that the use of formative assessments led to improvements in both the visualisations and the pedagogy used to teach database concepts to a wide variety of students.

The need for effective professional development for secondary teachers in computational thinking is the theme of the article by Monica M. McGill, Leigh Ann DeLyser, Karen Brennan, Baker Franke, Errol Kaylor, Eric Mayhew, Kelly Mills and Aman Yadav. This was a topic also discussed in some depth at the ACM International Conference on Education Research (ICER) in 2019.

Junnan Yu, Janet Ruppert, Ricarose Roque and Ben Kirsher investigate the need for analysis of social issues through a computational lens, or as they put it, critical computational literacy. This has been explored and analysed in several different contexts, all of which are very thought-provoking.

Our regular columnists have once again delivered a selection of thoughtful pieces.

Three columns address problems and solutions that Covid-19 has injected into our academic lives. Since the coronavirus shows no sign of leaving our lives soon, both the problems presented and the solutions discussed are well worth reading.

- Jeff Popyack describes the impact on UPE of the sudden shift to everything (including the induction ceremony) handled online due to the COVID-19 pandemic, which is an experience we can all relate to on several levels.
- Cara Tang and Christian Servin have a similar theme, i.e., describing the impact of the pandemic on community colleges, where student resources are often scarce, and isolating students from the campus can have various unintended effects, including the effect on students from just across the border.
- Lauri Malmi discusses how the pandemic caught them very well prepared, and in fact perhaps better prepared than most. This is a not perspective that we have not heard very often recently!

And finally, the intrepid David Bunde and the team of Zack Butler, Christopher L. Hovey and Cynthia Taylor continue their series on prominent propagators, with the third in the series featuring Michael Kölling. Michael is a Vice Dean of Education at King's College London in the UK, and is best known for his work on BlueJ and Greenfoot, which are tools that assist students to learn programming by using graphical concepts, simulations and games.

It is our pleasure to introduce the second article in our "As I See It" section. We see *Inroads* as a vehicle for discussion among all members of the computing education community, and this new section provides a different opportunity for the airing of ideas and points of view. As regular readers will be aware, each issue features submitted articles, which are reviewed for relevance and quality, as well as columns from a panel of regular contributors, often with a particular theme. We believe there is room

for this third section as well, which provides a similar platform to the regular columnists, but on an ad hoc basis. This will provide an opportunity to publish position pieces and perspectives that we expect will debate from a broad spectrum of the community.

In the contribution in this issue, Terence Kelly introduces an improvement to breadth-first search with the intriguing title of 'A Penny in Every Fuse Box.' Watch out for the haiku as well!

We would love to see more submissions in this section, especially if there is a debate to be had. This could emulate some of the debates in 'Letters to the Editor' sections of the great metropolitan newspapers. Our vision is that the publication of an edition of *Inroads* each quarter will provide a stimulus for discussion and debate, with articles, columns and now ad hoc 'As I See It' pieces. This could be about computing content, such as Terence's article, pedagogical approaches (such as the rise of bootcamps), learning issues for a post-pandemic world, or interesting and/or quirky experiences.

Submission of an article (for 'As I See it' or as a regular article) is done via the *ACM Inroads* portal, and we work to ensure prompt and efficient reviewing. This means that articles are double-blind peer-reviewed typically within a few months of submission, so your piece will appear relatively quickly. We also strongly encourage the use of images in your submissions, as these greatly increase the level of engagement.

As ever, we welcome other forms of participation as well, including our ongoing need for reviewers; or just send us your feedback or an idea for what you would like to see in *Inroads*.

Just like most of you, we will be glad to put this year behind us, and we look forward with renewed energy and hope to a safe, prosperous, and successful 2021 for all. ❖

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Editors-in-Chief

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