Nine undergraduate papers from the Queen's School of Computing's Perk Lab were accepted to the SPIE Medical Imaging: Image-Guided Procedures, Robotic Interventions, and Modeling conference in Orlando, Florida - one of the largest international conferences in the field of medical imaging. The 10-page papers will be published in the SPIE proceedings and presented at the conference on February 11-16, 2017. The research and the resulting papers were completed this past summer.

In addition to their own first-authored paper, Zac Baum co-authored 3 further papers and Vinyas Harish co-authored 2 further papers. Eden Bibic, co-author, was a grade 11 high school student on Queen's University Internships in Computing (QUIC). Rene Xu, co-author, contributed her work through CISC 500 undergraduate thesis.


Open-source software for collision detection in external beam radiation therapy - VM Suriyakumar, R Xu, C Pinter, G Fichtinger.

Patient-specific pediatric silicone heart valve models based on ultrasound - A Ilina, A Lasso, MA Jolley, B Wohler, A Nguyen, A Scanlan, Z Baum, F McGowan, G Fichtinger.

Usability of a real-time tracked augmented reality display system in musculoskeletal injections - Z Baum, T Ungi, A Lasso, G Fichtinger.


Skull registration for prone patient position using tracked ultrasound - G Underwood, T Ungi, Z Baum, A Lasso, G Kronreif, G Fichtinger.


Study into the displacement of tumor localization needle during navigated breast cancer surgery - C Yan, T Ungi, G Gauvin, D Jabs, A Lasso, CJ Engel, J Rudan, G Fichtinger.