John Kanji - Curriculum Vitae

jkanji@dgp.toronto.edu - johnkanji.com - +1 (647) 572-1746
55 Bellevue Ave, Toronto, ON, Canada, M5T 2N5

Profile

I am a Computer Science PhD student studying at the University of Toronto. I am currently working on problems in data-driven computer animation, geometry and physical simulation. I also have strong problem solving and communication skills. I am keen to develop my knowledge and research skills while developing tools and methods to make high-quality animation easy and breezy.

Education

PhD Computer Science - University of Toronto (2019-Present)
Advisor: Prof. David I. W. Levin

MSc Computer Science - University of Toronto (2017-2019)
Advisor: Prof. David I. W. Levin
Thesis Title: Convolutional Humanoid Animation via Deformation.

BEng Computer Science with a Year in Industry - University of York (2013-2017)
Advisor: Dr. Michael Freeman
Thesis Title: Hardware Optimisation of an Orientation Estimation Algorithm.

Publications

Journal Papers

Jeruzalski, T. , **Kanji, J**. , Jacobson, A. and Levin, D. I. (2018), Collision-Aware and Online Compression of Rigid Body Simulations via Integrated Error Minimization. Computer Graphics Forum, 37: 11-20.

Posters

Timothy Jeruzalski, **John Kanji**, Alec Jacobson, David I.W. Levin. (2018) Error Bounded Online Compression of Rigid Body Simulations. Graphics Interface.

Unrefereed

Kanji, J. and D. I. Levin. (2019), Convolutional Humanoid Animation via Deformation. arXiv preprint, arXiv:1908.04338.

Awards and Honours

NSERC Postgraduate Scholarship-Doctoral
$21,000 per annum - September 2019

Bell Graduate Scholarship
$20,000 - August 2018

Robert E. Lansdale/Okino Computer Graphics Graduate Fellowship in DGP
$2000 - November 2018

Work Experience

Deep Learning Research Intern - NVIDIA (2019)

Exploration, development and implementation of new techniques for applying deep learning to time-series 3D data using the PyTorch deep learning framework, supervised by Prof. Sanja Fidler.

Web Chair - Symposium on Computer Animation 2020 (2019)

Design and implementation of the website for the 2020 ACM SIGGRAPH/Eurographics Symposium on Computer Animation.

Teaching Assistant - University of Toronto (2017-Present)

Duties included preparing and delivering tutorials and labs, and marking exams and assignments.

Treasurer - Computer Science Graduate Students' Union, University of Toronto (2018-2019)

Responsible for all financial matters, including preparing budgets and grant applications.

Sandwich Placement Year - Wellcome Trust Sanger Institute (2015-2016)

Full-stack web development and maintenance of a laboratory information management system webapp. Involved communicating with users and implementing features independently and as part of a team.

Skills

- Python - Strong experience including projects making heavy use of the SciPy numerical programming stack.
- Matlab - Proficient at fast prototyping of graphics algorithms
- C++ - Experience in numerical C++ for prototyping projects using libraries such as Eigen and libigl
- Web development - Experience of Javascript, including jQuery, and with HTML, CSS, and Sass
- SQL - Experience with Oracle databases, writing SQL and PL/SQL, and schema design
- Version Control with SVN and Git

References

Prof David I.W. Levin
diwlevin@cs.toronto.edu
Dynamic Graphics Project,
University of Toronto
40 St George St, Toronto, ON,
Canada, M5S 2E4

Prof Eitan Grinspun
eitan@cs.toronto.edu
Dynamic Graphics Project,
University of Toronto
40 St George St, Toronto, ON,
Canada, M5S 2E4