

Randle Taylor

curriculum vitae

Skills

- Languages** Proficient with Python and JavaScript. Familiar with C, Matlab, PHP, Java, and Fortran
- Web Dev** Django, jQuery, Knockout.js, Bootstrap, AJAX, HTML/CSS
- Analysis** numpy, scipy, matplotlib, pandas, Excel
- Version Ctrl** git
- Databases** PostgreSQL, SQLServer

Education

- 2004–2006 **M. Sc. Medical Physics** *Carleton University* Awarded With Distinction.
 - THESIS TITLE *Monte Carlo Simulations for Brachytherapy*
 - SUPERVISOR *David W. O. Rogers*
- 1999–2004 **B. Sc. Honours Co-op Physics** *University of Waterloo* Deans Honour List.

Experience

- 2012–present **Open Source Project Leader** QATrack+ <http://qatrackplus.com/>.
Designed and developed a Django web application to manage radiation therapy QA data. QATrack+ was open sourced in 2013 and is now used in 10+ cancer centres worldwide.
 - Technology used: Python, Django, JavaScript, CSS, Bootstrap, jQuery, JSON, Windows Server 2008, IIS7, SQLServer, Linux, PostgreSQL, git.
 - QATrack+ is developed to be compatible with legacy (IE8+) and modern web browsers.
- 2011–2014 **Medical Physics Associate** THE OTTAWA HOSPITAL Ottawa.
Designed and developed modern web applications and GUI tools to improve the efficiency of the cancer centres quality assurance program.
 - Wrote and deployed numerous web applications to replace legacy spread sheet systems.
 - Technology used: Python, Django, JavaScript, CSS, Bootstrap 2 & 3, Knockout.js, jQuery, JSON, Windows Server 2008, IIS7, SQLServer 2008, git.
 - Improved co-workers efficiency by automating routine, tedious and error prone tasks.
 - Administrator of our departments Windows Server 2008 and Windows Server 2005 servers.
 - Wrote policies and procedures for clinical workflows.
 - Gave presentations at a number of conferences, hospitals and a Python user group.
- 2008–2010 **Software Developer** SELF EMPLOYED Durham, U.K. & Waterloo, ON.
Wrote and marketed software independently and for clients.
 - Developed and marketed a commercial Monte Carlo simulator for poker using C & Python. *Sold to World Poker Tour Bootcamp in 2012.*
 - Developed *Orbis*, an application for teaching university students at the University of Waterloo & University of Guelph about Huckel molecular orbital theory. *Orbis* was written in Python using Numpy, Scipy, matplotlib & wxPython.

- 2006–2008 **Medical Physics Research Assistant** CARLETON UNIVERSITY Ottawa, ON.
Performed academic research duties for The Carleton Laboratory for Radiotherapy Physics.
- Development of scientific software using Fortran & Python.
 - Researched, wrote and published scientific papers (<http://randlet.com/papers-talks/>).

Co-op positions

- 2003 **Medical Imaging Research Assistant** *Robarts Research Institute* London, ON.
2001 **Math Tutor** *Humber College* Toronto, ON.

Interests

Tech *Ottawa Python Authors Group, volunteer for Girl Develop It Ottawa.*

Other *Motorcycling, skiing, traveling.*

Invited Talks & Conference Presentations

- 2014 **Filling the gaps in commercial clinical software** *R. E. Taylor* Ottawa Medical Physics Institute National Research Council, Ottawa, Canada.
- 2014 **SaILS: Open Source Software for Incident Learning** *R. E. Taylor and C. Angers* Canadian Organization of Medical Physics Winter School Quebec City, Canada.
- 2013 **Python at The Ottawa Hospital Cancer Centre** *R. E. Taylor* Ottawa Python Authors Group Monthly Meeting Ottawa, Canada.
- 2013 **Leveraging Software To Improve Quality In The Clinic** *R. E. Taylor* McGill Medical Physics Department, Montreal General Hospital Montreal, Canada.
- 2013 **QATrack+: A free and open source tool for radiotherapy quality assurance** *R. E. Taylor* Odette Cancer Centre, Sunnybrook Hospital Toronto, Canada.
- 2013 **QATrack+: A free and open source tool for radiotherapy quality assurance** *R. E. Taylor, C. Angers, D. La Russa, R. Studinski, D. Mason, B. Clark* Canadian Organization of Medical Physics Winter School Mt. Tremblant, Canada.
- 2007 **An EGSnrc generated TG-43 dosimetry parameter database** *R. E. Taylor and D. W. O. Rogers* Monte Carlo Workshop McGill University, Montreal, Canada.
- 2006 **Monte Carlo Modeling of the Xofig AXXENT X-Ray Source** *R. E. Taylor, G. Yegin, and D. W. O. Rogers* AAPM 48th Annual Meeting Orlando, USA.

Publications

- 2008 **EGSnrc Monte Carlo calculated dosimetry parameters for ^{192}Ir and ^{169}Yb brachytherapy sources** *R. E. P. Taylor, D. W. O. Rogers* *Med. Phys.* 35 4933–4944.
- 2008 **More accurate fitting of ^{125}I and ^{103}Pd radial dose functions** *R. E. P. Taylor, D. W. O. Rogers* *Med. Phys.* 35 4242–4250.
- 2008 **An EGSnrc Monte Carlo-calculated database of TG-43 parameters** *R. E. P. Taylor, D. W. O. Rogers* *Med. Phys.* 35 4228–4241.
- 2007 **Benchmarking BrachyDose: voxel-based EGSnrc Monte Carlo calculations of TG-43 dosimetry parameters** *R. E. P. Taylor, G. Yegin, D. W. O. Rogers* *Med. Phys.* 34 445–457.