Randle Taylor

curriculum vitae

Experience

2012–present **Project Leader & Lead Developer**, 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 compatabile with legacy (IE8+) and modern web browsers.
- I provide extensive support to users via email, an online forum (`https://groups.google.com/forum/#!forum/qatrack`), and remote desktop sessions.

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.*

☎ 519-362-8721 • ✉ randle.taylor@gmail.com • http://randlet.com

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.

Invited Talks & Conference Presentations

2014 **Filling the gaps in commercial clinical software**, *R. E. Taylor*, Ottawa Medical Physics Institue, 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 Xoft 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 192Ir and 169Yb brachytherapy sources**, *R. E. P. Taylor, D. W. O. Rogers*, Med. Phys. 35, 4933–4944.

2008 **More accurate fitting of 125I and 103Pd 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.