TALON CHANDLER CURRICULUM VITÆ

Contact Information

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Education

B.A.Sc. Engineering Physics

With Distinction

Minor: Electrical Engineering

GPA: 3.93/4.00

University of British Columbia

2010 - 2015

Research Interests

Magnetic resonance imaging, interventional radiology, imaging physics, nuclear magnetic resonance, magnetization transfer, quantitative myelin detection, myelin microstructure, health care optimization, Monte Carlo decision making.

Research Experience

UBC MRI Research Centre

Supervisors: Dr. Alex MacKay & Dr. Carl Michal

April 2014 – Present

- Designed and performed nuclear magnetic resonance experiments to study inhomogeneous magnetization transfer as a new method of myelin detection.
- Delivered talk: "NMR Study of Inhomogeneous Magnetization Transfer".

UBC Centre For Operations Excellence

Supervisor: Dr. Steven Shechter

April 2013 – Present

- Designed and implemented a Monte Carlo model for evaluating decision policies for initiating dialysis on kidney transplant patients.
- Working paper: "The Cost-Effectiveness of Arteriovenous Fistula Referral Policies in Chronic Kidney Disease".

Employment History

Kardium Inc.

Burnaby, BC

September – December 2013

- Designed and performed radio frequency ablation experiments to study electrical signal propagation in heart tissue.
- Analyzed CT, MRI, and X-ray data to determine heart chamber sizes in populations.

SRK Consulting Inc.

Vancouver, BC

January – April 2012

- Designed a finite element fluid dynamics model to study low oxygen areas near waste rock dumps at mine sites.
- Applied Monte Carlo methods to model mine site water and contaminant flows.

Project Experience

Radio Frequency Network Analyzer

Supervisor: Dr. Carl Michal September – December 2014

• Designed and constructed a low cost radio frequency network analyzer for use with nuclear magnetic resonance experiments.

Single Cell Electroporator

Supervisor: Dr. Kelly Sakaki

January – April 2014

• Designed and constructed a single cell electroporator system for use with two photon microscopy experiments.

Awards

Eastern Irrigation District Graduate Scholarship	2014
NSERC Undergraduate Research Award	2014
NSERC Industrial Undergraduate Research Award	2013
UBC President's Entrance Scholarship	2010
Alexander Rutherford Scholarship	2010
Brooks Junior Citizen of the Year Scholarship	2010

Computing Skills

Languages: C, C++, Python, UNIX shell scripting

Applications: LATEX, MATLAB, ArcGIS

Operating Systems: GNU/Linux, OSX, Windows

Other Activities

Ultramarathon trail running, ultimate, SCUBA diving, apiculture.