

Elliot SNOW-KROPLA

PERSONAL DATA

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WORK EXPERIENCE

OCT 2015 - AUG 2017 | Technical Cofounder of TWO AND THIRTY SOFTWARE

Developed networked multi-player video game *Go Go Electric Samurai* under contract with HEXAGON GAMES generating \$60,000 in revenue

Designed and wrote the code for the simulation game *Hairy Little Buggers* including complete design and implementation of the AI scripting language and interpreter

Managed the art team responsible for creation of game assets on *Go Go Electric Samurai* and *Hairy Little Buggers*

OCT 2014 - APR 2015 | Software Developer at QRA CORP

As part of work on the QVTrace Verification & Validation tool, implemented bit-blasting routines for converting arithmetic problems into boolean logic problems

2011 - 2014 | Teaching Assistant, Dalhousie University

Lectured on data visualization and data presentation for *Computational Methods in Physics*

SUMMERS 2010 & 2011 | Research Assistant in the PIERCE LAB, Dalhousie University

Conducted research on the effects of cosmic rays on cloud formation using the global atmospheric chemistry model GEOS-CHEM

EDUCATION

AUG 2014 | Master of Science in PHYSICS, **Dalhousie University**, Halifax

Thesis: **"Compiling Programs for an Adiabatic Quantum Computer"**

Supervisor: Prof. J. Kyriakidis

MAY 2011 | Bachelor of Science in PHYSICS, **Dalhousie University**, Halifax

First Class Honours

Thesis: **"Understanding uncertainties in predictions of global aerosol number concentrations"**

Supervisor: Prof. J. Pierce

SKILLS

Data Modelling and Analysis: PYTHON, SQL, MATPLOTLIB, SCIPY, NUMPY, IPYTHON/JUPYTER

General Programming: PYTHON, C, C++, FORTRAN, C#, JAVA, JAVASCRIPT, GO, RUST

Software: MATLAB, POSTGRESQL, FLASK, EXCEL, LABVIEW, NGINX

PUBLICATIONS

Snow-Kropla, E. J., Pierce, J. R., Westervelt, D. M., and Trivitayanurak, W.: *Cosmic Rays, aerosol formation and cloud-condensation nuclei: sensitivities to model uncertainties*, Atmos. Chem. Phys., 11, 4001-4012, <https://doi.org/10.5194/acp-11-4001-2011>, 2011.

OUTREACH

Participated in “PHYSICS FUN AND DISCOVERY DAYS” outreach program for children in Grades 6-12, including:

Planetarium Shows	Used the Halifax Planetarium to show students topics in Astronomy, Astro-Physics and Ancient Mythology
Liquid Nitrogen Shows	Used liquid nitrogen to demonstrate how material properties change at a range of temperature scales including superconductivity, condensing liquid oxygen, and making a salad with a hammer
Discovery Room	Gave students hands-on activities that demonstrate physical principles such as freezing motion with a strobe light, measuring electrical signals of the heart, and acoustics of the voice