kasra koushan

personal

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skills

programming Python, Java, MATLAB markup HTML, CSS, LaTeX tools Git, SVN, Shell, Vim

activities

Robotics **UNITY Dance** Philosophy Congress Hackathons (3) **M00Cs** in exoplanets. behavioural biology, bioinformatics, game theory

education

2014-2018 **Bachelor of Science** University of Toronto

Mathematics & Computer Science, CGPA 4.00/4.00

Coursework: Software Design, Calculus, Linear Algebra, Analysis on Manifolds, Statistics, Mechanics & Electromagnetism

experience

May-Aug '15 Theoretical Astrophysics, McGill University

Montreal, QC

Research Assistant

Produced models of exoplanet interiors to find relationships between central pressure, envelope entropy, and other parameters as constrained by mass and radius observations, supervised by Professor Andrew Cumming. Technical details:

- Developed models in Python using SciPy, NumPy, Matplotlib
 - Adaptive-step numerical integration, root-finding, differential evolution, multi-dimensional spline interpolation, Monte Carlo schemes
- Presented at Canadian Undergraduate Physics Conference (Oct '15)

Sept '15 -**Neuroscience, University of Toronto**

Toronto, ON

Research Assistant

Implementing and reviewing various sequence learning algorithms and grammar generators to be used in human sequence learning trials, under the supervision of Professor Chris Honey.

projects

Sept '15 MHacks 6

> Web app for organization of political candidates' speeches and interviews into clips organized by topic. Worked in Python, using Indico API for machine learn-

Aug '15 thestrand.ca

The Victoria College Strand

Developer of Wordpress website for the official student newspaper of Victoria College at the University of Toronto. Working in HTML, CSS, JavaScript, PHP.

awards

May 2015 **Summer Undergraduate Research Award**

NSERC

Grant awarded on the basis of academic achievement and research potential by the National Science and Engineering Research Council of Canada.

Best Use of Parse API (2nd Place) Sept 2015

Awarded for use of Parse API in Glas4 project at MHacks. See glas4.co.

University of Toronto Scholar Sept 2015

University of Toronto

Awarded to top 100 students in class at the Faculty of Arts & Sciences.

May 2013 **AP National Scholar**

Marc Garneau Cl

Awarded for scores of 5/5 on AP Calculus, Economics, European History, and

English Language exams.