kasra koushan

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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)
MOOCs in *exoplanets,*
behavioural biology,
bioinformatics,
game theory

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	**glas4.co**	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 learning.

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.

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

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.

Sept 2015	**Best Use of Parse API (2nd Place)**	MHacks 6

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

Sept 2015	**University of Toronto Scholar**	University of Toronto

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

May 2013	**AP National Scholar**	Marc Garneau CI

Awarded for scores of 5/5 on AP Calculus, Economics, European History, and English Language exams.