

Angad Kalra

Toronto, ON

angadkalra94@gmail.com

angadkalra.com

github.com/angadkalra

Education

MSc Applied Computing, Data Science

September 2018 – December 2019

University of Toronto, Department of Computer Science

Courses (ongoing): Data Science Consulting, Quantum Computing, Neural Networks, Statistical Machine Learning

BSc Computer Science and Mathematics

September 2012 – May 2018

University of British Columbia

Technical Experience

Galiano Medical Solutions – Vancouver, BC

May 2018 – September 2018

Full Stack/Machine Learning Engineer

- Developed an application that allows doctors to find similar cases to their current patients' in order to reach the most probable diagnosis quicker. Intended for use on a tablet within hospitals/clinics, this "doctor's assistant" streamlines the process of receiving a complex case, consulting with other physicians, and delivering a diagnosis. Used ReactJS, Django, TensorFlow, and Elasticsearch.

Centre for Molecular Medicine and Therapeutics – Vancouver, BC

May 2017 – August 2017

Undergraduate Research Assistant

- Developing and applying statistical and computational models for integrating and interpreting diverse types of genomics data, with the ultimate goal of disentangling meaningful molecular associations for common and complex pathologies, such as neurodegenerative and psychiatric disorders.

Vision Critical Communications Inc. – Vancouver, BC

January 2016 – August 2016

Software Development Intern

- In the first four months, responsibilities were fixing defects, writing integration tests, improving test coverage in deployment pipeline and learning new technologies simultaneously. New technologies included ASP.NET MVC, C# and Visual Studio.
- In the last four months, fixing defects and writing tests continued. Additionally, developed in HTML5 and various JavaScript frameworks (Grunt, jQuery, Jasmine) to replace outdated Flash technology that existed in product.

Recent Projects (github.com/angadkalra)

BC Children's Hospital, Vancouver, BC - Peak Predictor

- Implemented deep CNN described in this paper: <http://www.biorxiv.org/content/early/2015/10/05/028399> to predict specific protein binding sites on a given DNA sequence. The neural network has 3 convolutional layers and 2 fully connected layers, and uses batch normalization, ReLU, max pooling, and dropout.

Director of Code the Change Foundation – <http://www.codethechange.ca/>

- Verna J. Kirkness STEM Education Program is a local charity that we built a database & web app for in order to help them organize their data, approach donors for funding, and save their employees time and money. We used Python and Django for the web app, and MySQL for the database, all hosted on DreamHost.

Technical Skills

Programming Languages: Python 3, JavaScript.

Libraries: Tensorflow, Numpy, Pandas, Scikit-Learn

Web Development: Django, Flask, Docker, ReactJS.

Databases: PostgreSQL, MySQL, Elasticsearch