Ian Huntress

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EDUCATION

Rensselaer Polytechnic Institute (RPI), Troy NY — Bachelor of Bioinformatics and Molecular Biology - Computer Science Minor

August 2013 - Expected: May 2017
Cumulative GPA: 3.47

Modern biological problems demand a unique breadth of knowledge, from classical biochemistry to the growing big data toolsets. Therefore, I am specifically steering my classroom experience toward machine learning while steering my technical experience toward experimental proteomics and genomics.

EXPERIENCE

Dr. Xing Wang, DNA nanostructure and Molecular Biology Lab, RPI

Summer 2015 - Present

Produced proteins from gene insert to glycerol storage: transformation, colony PCR, culturing, harvest, purification, analysis. I have broad exposure to a variety of lab techniques, agar/protein gels, PCR, DNA purification and vector design. Required Vector NTI, careful lab notes, and familiarity with scientific journals.

Data Mining and Machine Learning, RPI

Fall 2016 - present
Study of underlying theory including the linear model, regularization, clustering, feature transform, and neural networks. Implemented, backpropagation, Support Vector Machines, and cross validation. I have developed the mathematical intuition to generalize these techniques out of sample.

UPAC Lights, RPI

Fall 2013 - Present
Lighting company for on-campus events. Hardware troubleshooting, and webmaster

SKILLS

Problem solving in Lab -

Iterative failure is the most difficult and important part of the scientific method. I have built my failure tolerance through project-based scientific research.

Data analysis -

I have the independent competence to find the right tool for the right job, Numpy for linear algebra, BLAST for alignment, FFT for signal processing.

PROJECTS

T7 endonuclease interactions with 4-arm DNA junction - Wang Lab

The project required accurate construction, cataloging, and analysis of different enzyme-DNA nanostructure reactions in order to describe binding specificity for 4-arm DNA junctions.

Coding Experience

Python, Javascript, C++
HTML, SQLite, Ubuntu, PHP
MATLAB, Numpy, Java, SPSS

AWARDS

RPI Dean's List