

CHARLES DING

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OBJECTIVE

To work in a fast-paced, challenging work environment with the opportunity to utilize my skills, absorb knowledge and garner experience. To demonstrate an affinity for teamwork and communication skills, as well as a willingness to expand boundaries and welcome failure. A creative and driven college student hoping to learn the application and management of data and technology.

TECHNICAL BACKGROUND

Programming

- Java, C, C++, Python, MIPS Assembly, Basic HTML knowledge
- Git, Tensorflow, Keras, Sci-kitlearn, OpenCV, Mathematica, LaTeX
- Competitive Programming: USACO Gold and American Computer Science League Finalist

Mathematics

- AIME Qualifier and AMC Honor Roll
- Purple Comet Competition 1st place National Winner
- Honors Section @Carnegie Mellon

EXPERIENCE

Business Analytics Research Intern

2020-2021

University of Iowa

- Project: Quantifying the Persuasiveness and Success of Crowdfunding Projects
- Python - pandas, keras, sklearn: built Convolutional Neural Network models for product comparison traits
- 75% validation with data augmentation
- Data labeling for over 2000 videos

Inspirit AI

2019-2021

Project-based Program w/ Stanford Graduate Students

- Python - tensorflow, keras, pandas
- Conducted a project for enhanced image recognition of self-driving cars through the YOLO algorithm
- Created a seizure prediction LSTM Recurrent Neural Network
- Implemented breast cancer analysis model with Convolutional Neural Network

PROJECTS

Compilers and Interpreters

2020-2021

- Created PASCAL compiler using Java and MIPS
- Structured Scanner, Parser, and Abstract Tree with Java
- MIPS as low-level optimization assembly language
- Could process loops, expressions, variables, conditionals, etc...

Neural Networks

2019-2021

- Built standard Neural Network from the bottom-up in Java - from convolution to back-propagation
- Optimization of standard parameters and learning rate
- Created a prediction on the number of fingers on a hand

EDUCATION

Carnegie Mellon University

Expected Graduation:

Information Systems and Computer Science Major

May 2025

Relevant Courses: Principles of Imperative Computation, Functional Programming, Great Theoretical Ideas in Computer Science, Concepts of Mathematics, Matrix Theory, Vector Analysis/Calculus in Three Dimensions

The Harker School

August 2018 - May 2022

High school Diploma - GPA: 4.55/4.0

Relevant courses: Compilers & Interpreters, Datastructures, Neural Networks, Computer Architecture, Numerical Methods, Robot Kinematics Software, Calculus, Multivariable Calculus, Differential Equation, Signals and Systems, Differential Equations II (Higher-Order DFQ, Nonlinear Dynamics, Chaos)