

Daniel Hyunjae Lee

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EDUCATION

Cornell University College of Arts and Sciences, Ithaca, NY; GPA: 3.49

Expected May 2021

Bachelor of Arts, Double Major in Computer Science and Mathematics, Minor in Fashion Studies

- Fall 2019: CS 4780: Machine Learning for Intelligent Systems, CS 4810: Theory of Computation
- Spring 2019: CS 3110: Functional Programming; CS 4820 Introduction to Algorithms
- Fall 2018: CS 2112: Honors OO Design & Data Structures; CS 2800: Discrete Math

Interlake High School, Bellevue, WA

Sept. 2014—May 2018

- American Invitational Mathematics Exam (AIME) 5-time Qualifier; Score: 6, Feb. 2018; USACO Silver Medal, Dec. 2016
- National AP Scholar (Score 5: 14 tests including CS, BC Calculus, Physics C E/M, Physics C Mechanics; Score 4: 3 tests)

EXPERIENCE

Kurvv, Bellevue, WA

July 2019—Aug 2019

Summer Intern

- Assisted in codebase development for pipelining and company infrastructure, including the codegenerator, Azure interface, and several payment interfaces including Stripe; Wrote MSTests and documentation for codebase; Used C# and .NET

Cornell University Computer Science Department, Ithaca, NY

Aug 2019—Dec 2019

Consultant, CS 2112: Honors OO Design & Data Structures

- Student staff running a honors Java course, responsible for holding office hours, grading programming projects, assisting in lab sessions, and grading exams

University of Washington Applied Physics Lab and Department of Gastroenterology, Seattle, WA

Sept. 2017—June 2018

Intern

- Worked in HIFU lab, supervised by Professor Tatiana Khokhlova in pancreatic and liver cancer treatment research
- Created GUI's for scripts, helped operate equipment such as oscilloscopes and hydrophones (with scripts and manually)
- Categorized and quantified treatment results on lab mice using Matlab Image Analysis and Optimization toolboxes

Private Tutor, Bellevue, WA

2017—Aug 2019

- Over 150 hours of tutoring middle and high school students in topics such as Calculus, AP Physics, and Olympiad math

PROJECTS

Shape Classification

- Designed and trained a neural network to categorize simple shapes using Image Analysis Toolbox and Optimization Toolbox in MATLAB. Analyzed accuracies of networks trained using different image analysis algorithms

Critter World

- Created a simulation with “critter” characters, each with different instructions and characteristics
- Implemented different front ends, including direct print to console, GUI using JavaFX, and a client using HTTP

VisiCalc

- Designed and implemented a replica of the very first commercial spreadsheet program for personal computers
- Used object-oriented design to implement functionalities of a spreadsheet and created a terminal interface for testing

Pacman

- Programmed intelligence for Pacman characters (Pacman, Inky, Blinky, Pinky, and Clyde) using pathfinding algorithms

Space Battle

- Programmed intelligence for battleships and interactions with other assets

Project Ironleaf

- Collaborated with 9 other students to produce a video game to teach concepts of environmental sustainability

VOLUNTEERING

Odle Middle School Code Club, Bellevue, WA

2016—2018

Founder, Coach, President

- Collaborated with school administrators and PTSA at local middle school to create a club with the goal of helping students develop an interest in technology and computer science. Collaborated with colleagues to compile a Java-based curriculum for beginners, and coached more experienced students in programming skills through USACO practice sets

SKILLS

- Languages: Java (Advanced), MATLAB (Advanced: Image Analysis, Optimization), OCaml (Advanced), C# (Advanced), Python, Object-oriented design, functional languages, neural networks, Bootstrap, HTML, JavaScript, LaTeX, JSON
- Problem solving and Olympiad math
- Korean (fluent), Spanish (conversational), Public speaking, policy debate