EDWARD FENG

efeng@live.unc.edu • LinkedIn: efeng1 • GitHub: efeng100 • Website: efeng100.github.io

EDUCATION

University of North Carolina at Chapel Hill Expected May 2023

B.S. Computer Science, B.S. Statistics, Mathematics Minor
GPA: 4.0
Relevant Coursework: Foundations of Programming, Data Structures, Systems Fundamentals, Computer Organization, Models of Language and Computation, Discrete Mathematics, Linear Algebra, Introduction to Data Science, Modern Algebra

North Carolina School of Science and Mathematics 2017 - 2019

GPA: 4.7
Relevant Coursework: Procedural Programming, Java, Databases, Computational Physics, Graph Theory, Combinatorics and Game Theory, Introduction to Complex Systems, Structure & Dynamics/Modern Networks, Math Modeling, AP Statistics

SKILLS

Languages Java | Python (NumPy, Matplotlib) | C | R | HTML/CSS/JavaScript
Technologies Git | Vim | Linux CLI
Other Chinese (listening, basic speaking) | Spanish (basic)

EXPERIENCE

Software Engineering Intern June 2020 - Aug. 2020

Cisco Systems | Durham, NC

- Developed tests for Cisco's new generation of Spitfire routers using pyATS (Cisco's Python-based testing infrastructure), expanding case coverage and preventing regressions in future years
- Created parsers using Google's TextFSM that allow for easy access to changing router state information and updated existing tests to take advantage of this abstraction

Machine Learning and Data Privacy Research Assistant Aug. 2018 - Feb. 2019

Duke University | Durham, NC

- Assisted in research on the use of artificial neural networks in creating audio-based filters to improve data privacy
- Studied machine learning, including the structure and function of convolutional and recurrent neural networks, as well as their application to spectrograms through Python's Keras library

PROJECTS

Online Pokédex App HTML, CSS, JavaScript

- Web-based version of the Pokédex, the digital encyclopedia of Pokémon from the video game series
- Data pulled from the PokéAPI to display Pokémon in a responsive card grid design
- Additional Pokémon information provided for each species card on click

Conway's Game of Life MVC Implementation Java

- Java-based simulation of Conway's Game of Life with a GUI built with Java Swing
- Designed using the model–view–controller architecture
- User-chosen initial state and board progression rules
- Multithreaded auto-advance feature with adjustable board update speed

AI Checkers Python

- One-player or two-player checkers game in Python with a GUI created using the Tkinter library
- Computer AI player calculates best move using a recursive minimax function that considers best/worst cases over a chosen number of turns in the future

Discus Dice Game Java

- Java implementation of Reiner Knizia's Dice Decathlon Discus event (a family tabletop game)
- GUI built with JavaFX