NICOLAS WINSTEN

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SKILLS

- Java, Python, C
- Web development (Javascript, Elm, d3.js)
- Functional Programming (Haskell, Scala)
- Git

EDUCATION

University of Arizona

Bachelor of Science
Computer Science
- summa cum laude

University of Arizona

Master of Science
Computer Science
- 4.0 GPA
- graduate coursework in compilers, database management systems, data visualization, data systems, computation theory, software engineering

PROFESSIONAL SUMMARY

New graduate of computer science with broad coursework experience. Particularly passionate about programming languages and compilers.

PROFESSIONAL EXPERIENCE

University Of Arizona - Research Assistant
05/2022 - 05/2023

- Designed and executed experiments in modeling resource contention in high performance computing

University Of Arizona - Tutor
02/2019 - 01/2021

- Tutored diverse groups of students in computer science concepts
- Collaborated with learning challenged students to complete homework assignments, identify lagging skills, and correct weaknesses

PROJECTS

Tiny C compiler
- Written in C, targeting MIPS assembly

IBM Watson clone
- Question answering language model built with Scala and Lucene

SIGMOD 2023 Programming Competition
- Challenge to build the most accurate nearest neighbor graph for 10 million (100 dimensional) vectors in limited time
- Explored state-of-the-art graph based solutions and novel improvements

Nemanodes
- Team project
- In-browser simulation of a petri dish of tiny creatures that evolve neural networks using the NEAT algorithm
- Built with Javascript and PIXI.js

P2P Wikipedia Game
- Peer-to-peer web app to play the Wikipedia game
- Incorporates data visualization of player moves and an AI pathfinder
- Built with Elm