

Naina Vig

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EDUCATION **Wesleyan University** - *Bachelor of Arts*, Middletown, CT, May 2020
Double Major: Computer Science and Mathematics, GPA: 3.49/4.00
Relevant Coursework: Automata Theory and Computability, Computer Networks, Multivariable Calculus, Abstract Algebra, Algorithms, Error-Correcting Codes, Vectors and Matrices

Dartmouth College - *Exchange Student*, January 2019 — June 2019
Relevant Coursework: Artificial Intelligence, Computer Architecture, Software Design and Implementation

EXPERIENCE *Research Assistant*, **Wesleyan University**, Middletown, CT, June 2019 — Present
Used mathematical modeling to analyze router networks and make inferences about router traffic.
Programmed a module that models a Markov Chain and computes significant metrics for input graph topology.
Gathered and reviewed materials to support development of routing strategies to optimize sender anonymity.

Course Assistant, **Wesleyan University**, Middletown, CT, January 2018 — December 2018
Aided students with learning Python and Computer Networks.
Provided assistance to professors with in class exercises, help sessions, and homework grading.

Business Intelligence Analyst Intern, **Allegro Microsystems**, Manchester, NH, June 2018 — August 2018
Developed Project Cycle Time reporting in Tableau to support strategic initiatives.
Utilized SQL to develop datasets to trigger alerts to cross-functional business user.
Added sustainability and automation to Board of Director presentation deliverables.

PROJECTS **ICMP Traceroute Application**
Implemented in Python an application to track the path a packet will take to its destination. Application sent ICMP echo requests and displayed response information to the user. Included timers to track response time and coded functions to create ICMP and IP headers for outgoing requests and extract header data from responses.

Chess AI
Implemented chess AI in Python using python-chess module. Used Minimax search to create interactive AI algorithm that makes informed decisions based on human player move. Optimized using alpha-beta pruning and transposition table lookups.

Nuggets
Implemented in C a game in which multiple users may travel through a maze and collect piles of gold. Utilized socket programming in C to enable multiple users to join the same game and Ncurses to display the game to users.

SKILLS Socket Programming, Data Analytics, Tableau, Algorithms and Data Structures, Scrum
Languages: Python, C, Standard ML, SQL

OTHER *Member*, **Wesleyan Women in Science**, Middletown, CT, October 2016 — Present
Member of organization that provides resources for women studying sciences at Wesleyan University.

Member, **Wesleyan Potters**, Middletown CT, September 2018 — Present
Attends lessons and open bench time at the ceramics studio.