



# DANHIEL VU

ASPIRING SOFTWARE ENGINEER

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## EDUCATION

### B.S. COMPUTER SCIENCE

- **Seattle University**  
Sep 2021 – Jun 2023, GPA: 4.0  
  
Relevant Coursework:
  - CPSC2500: Computer Organization
  - CPSC2600: Foundations of Computer Science
- **University of Washington**  
Sep 2018 – Mar 2021, GPA: 3.5  
  
Academic Achievements:
  - Dean's List: SP 2020, AU 2020, WI 2021  
Relevant Coursework:
  - CSE14X: Computer Programming Series
  - CSE154: Web Programming
  - CSE163: Intermediate Data Programming
  - CSE373: Data Structures And Algorithms
  - CSE414: Introduction to Database Systems
  - CSE417: Algorithms and Computation Complexity

## SKILLS

### LANGUAGES

Proficient: Java, Python  
Familiar: JavaScript, HTML/CSS, C++, SQL, ArcGis

### TECHNICAL TOOLS

Java Swing, MySQL, AsterixDB, Node.js, AJAX, JSON, Git, REST, OOP, RDBMS, R Shiny, Pandas, scikit-learn

## COMPETITIONS

- **SUDO CODE IN THE DARK HACKATHON**  
Feb 2020  
  
Collaborated with a partner and recreated three different websites sourced by UW in Javascript, HTML, and CSS without the usage of debugging, compiling, and other IDE tools.  
  
Won third place for most visually accurate, animated, and functioning websites.
- **ANGEL HACK 2019: SEATTLE**  
Jul 2019  
  
Designed and developed an application in Python that transcribed lecture notes for students with two other software engineers.

## PROJECTS

- **CHESS AND AI**  
Apr 2019 – Oct 2021  
  
Iteration 2:
  - Added all of the remaining special Chess rules: Castling, En passant, Pawn promotion, and Stalemate, without sacrificing AI time efficiency.
  - Improved the AI's algorithm, increasing the depth calculated, up to double the original depth.
  - Reorganized the code so it follows conventional object-oriented design methodologies.  
Iteration 1:
  - Implemented the game of Chess, and an AI that plays against the user, in Java and Java Swing.
  - The AI uses the Minimax with Alpha-Beta pruning algorithm.
- **CITI BIKE DATA ANALYSIS**  
Mar 2020 – Apr 2021  
  
  - Developed a program in Python to analyze travel patterns of Citi Bike users in Jersey City from 2015 to 2019.
  - Cooperated with two other students to filter and manipulate 20 million trip data values for spatial analysis through the Pandas and Seaborn libraries.
  - Responsible for predicting Citi Bike trip destinations given user information. The machine learning model utilized had an accuracy test score of 37.3% and a accuracy training score of 53.5%.
- **UW'S WEB POKEDEX GAME**  
Oct 2019 – Dec 2019  
  
  - Built a full-stack Pokemon game that re-enacts the battle mechanics sourced from the original game.
  - Structured the web page and appearance with HTML5 and CSS.
  - Client-side interactivity and behavior handled with Javascript.
  - Built an API that retrieves and stores pokemon information from the MySQL database with Node.js