

Randy Pham

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EDUCATION

University of California, Riverside

Jun 2025

Bachelors of Science in Computer Science | GPA: 3.05

Riverside, CA

Relevant Courses: Data Structures and Algorithms, Operating Systems, Databases, Machine Learning, Artificial Intelligence, Software Testing, Software Construction, Information Retrieval

TECHNICAL SKILLS

Programming Languages: Python, C++, Java, SQL, JavaScript, HTML, CSS

Tools/Frameworks: Git, VS Code, GTest, CMake, Slack, PostgreSQL, Spark

Libraries: Pandas, NumPy, Matplotlib, SciKit

Development Practices: Agile (Scrum), CI/CD, Version Control, Code Review, Unit Testing, Schema Design

Events Attended: Amazon Campus Prep Series

PROJECTS

Feature Selection Optimizer | *Python, Git*

Jan 2025 – Mar 2025

- Built Forward Selection and Backward Elimination algorithms in C++, employing Euclidean Distance and Leave-One-Out cross validation to select optimal feature subsets across datasets with up to 40 features and 1000 instances
- Achieved up to 96.2% classification accuracy on 6 feature datasets and 76.6% on 40 feature datasets utilizing iterative subset evaluation and accuracy tracking

Eight Tile Puzzle Solver | *C++, Git*

Jan 2025 – Feb 2025

- Engineered an A* based solver for 8 tile puzzle game using Manhattan Distance and Misplaced Tile heuristics, scaling 23 to 15K nodes expanded across difficulty levels ranging from easy to hard puzzles
- Bench marked Uniform Cost Search and A* variants, collecting and analyzing runtime metrics including solution depths (4-6), nodes expanded, and search performance
- Leveraged a heap based priority queue(heapq) to optimize selection and sustaining 18 to 8629 nodes at peak memory, supporting low and high difficulty puzzles

Movie Recommender System | *C++, Git*

Sep 2023 – Dec 2023

- Implemented Google Tests and CMake framework, testing code for 90% coverage ensuring recommender is reliable and free of duplicate movie titles and user ratings
- Integrated database containing 100+ movie titles and user ratings, ensuring dynamic updating of recommendations, enhancing UI interactions

EXPERIENCE

Cutie Hackathon

Nov 2023

Software Developer

Riverside, CA

- Built a C++ script to parse weather data files and calculate weekly lawn watering schedules by analyzing rainfall patterns, processing 100+ daily records, dynamically adjusting output based on > 0.5 inch precipitation thresholds
- Facilitated collaboration by on boarding team members to GitHub, managing version control and resolving merge conflicts to maintain development velocity
- Synthesized diverse project ideas into a cohesive technical scope, ensuring alignment on feature prioritization and responsibilities across front end and back end roles

Lexus of Stevens Creek

Dec 2021 – Aug 2023

Valet Driver

San Jose, CA

- Optimized dealership operations, by orchestrating intake and delivery of 15+ customer vehicles, minimizing service bottlenecks
- Coordinated in parallel with sales representatives and managers, aligning with customer transactions, improving queue times