

Contact

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annielytical.com

Annie Robison

EDUCATION

MS in Computer Science (2024)

University of California,
Davis, 4.0 GPA

Advisor: John Owens

BA in Economics-Mathematics (2015)

Whitman College, *summa cum laude*, 3.94 GPA

TEACHING

Teaching Assistant

- Gameplay Programming (Spring 2022)
- Machine Learning (Winter 2022)
- Computer Organization & Machine-Dependent Programming (Summer 2021)
- Interactive Media II (Spring 2021)

Associate Instructor

- Interactive Media I (Fall 2021)

TECHNOLOGY

- C++
- CUDA
- Thrust
- Python
- C#
- C
- SQL
- PHP
- Bash

MASTER'S RESEARCH

Gunrock (advisor John Owens)

- Implemented GPU MST with CUDA, C++ and Thrust
- Added NVBench support across Gunrock algorithms; worked with NVIDIA because Gunrock's control flow did not match what NVBench expects
- Added instrumentation and measured performance on Tesla V100 GPU; used that data to cut MST runtime up to 22% (17% on average)
- Contributed ~10k lines of code across MST, NVBench integration, performance analysis and graph builder updates
- Report: *Evaluating and Improving Performance in a GPU Graph Framework* (https://annielytical.com/ms_report.pdf)

INDUSTRY EXPERIENCE

Hamilton Company

Software Engineer Senior (February 2024 - Present)

Software Engineer II (February 2023 - February 2024)

- Leads software development for new MicroLab Prep products including the Hamilton Heater Cooler, HEPA / UV, and Fluid Motion Channels
- Works with Firmware and Mechanical Engineering teams to integrate new hardware into the robot
- Communicates with the device in C# at the lowest level of software

PinPoint Research

Senior Software Engineer (June 2022 - January 2023)

Software Engineer (November 2016 - June 2022)

- Built data pipelines to / from clients and vendors using PHP and Python APIs, Bash file deliveries, and PHP web reports

Plexuss.com

Data Scientist (Feb 2016 - Nov 2016)

- Developed machine learning algorithms to match students with colleges
- Implemented backend logic for various components including the sign-up flow, college search tool, and student matching process
- Automated data processing tasks with Python scripts

BetterHelp.com

Analyst (July 2015 - Feb 2016)

- Gathered insights from user data to improve acquisition and retention efforts
- Developed landing pages and performed A / B tests for funnel optimization