

Anna Schwartz

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EDUCATION

UNIVERSITY OF MINNESOTA BS COMPUTER SCIENCE 2022

Twin Cities, MN

- GPA: 3.015 / 4.0
- Track: Human - Computer Interaction (HCI)

COURSEWORK

UNDERGRADUATE

Artificial Intelligence (AI)

Algorithms & Data Structures

Program Design & Development

Operating Systems

Database Systems

Functional Programming

Formal Language & Automata Theory

GRADUATE LEVEL

Software Engineering

Interactive Web Development

UI Design, Implementation, &

Evaluation

Human Factors & Ergonomics

SKILLS

PROGRAMMING

Python • JavaScript (Node.js) •

C++ • C

MARKUP

HTML5 • CSS3 • SCSS / Sass

WEB FRAMEWORKS

Django • Flask • Express • Bulma •

Bootstrap • Wagtail CMS • React

TEMPLATING ENGINES

Handlebars • Jinja2 • Liquid

DATABASES

SQL • MongoDB

SOURCE CONTROL (SCM)

Git • Github

UNIT TESTING FRAMEWORKS

pytest • CxxTest

DEBUGGERS

GDB (GNU Debugger) • VS Code

DATA SCIENCE

Pandas

OTHER

LaTeX • Doxygen • Heroku

PROJECTS

PARALLELIZED N-PUZZLE SOLVER

2021 | Python, Pandas, Amazon EC2

- Runs heuristic search (A*, IDA* with choice of heuristic) on batch inputs of N-puzzle instances in parallel
- Collects search performance data for analysis in Pandas
- Fail-safes to prevent data loss in case of failure, as runs can take hours

PATTERN DATABASE (PDB) GENERATOR

2021 | Python, Amazon EC2

- PDB is a lookup table that stores the length of optimal solutions for subproblem instances for use in heuristic search
- Breadth-first traverses extremely large search space to generate pattern databases for 8- and 15-puzzle

INTERACTIVE WEB DEVELOPMENT COURSEWORK

2018 | Node.js, Express, MongoDB, Handlebars, Bulma, React, React Native, Heroku, Expo

- Hands-off project-based graduate level course
- Worked in team to take four web apps from concept to deployment in Agile-like 2-week sprints using MERN stack

WORK EXPERIENCE

STUDENT FRONT-END WEB DEVELOPER | SUA MARKETING

May 2018 – Aug 2018 | Minneapolis, MN

Python, Django, Flask, Wagtail CMS, Sass, SCSS, Jinjaz

- Received requirements from design team and implemented as mobile-first, responsive web UI
- Ported existing Flask/Django site to Wagtail CMS, preserving user interface while completely refactoring underlying data models
- Took initiative to redesign templates to optimize code re-use & improve maintainability

FULL-STACK WEB DEVELOPER INTERN | WELLS FARGO

June 2017 – Aug 2017 | Minneapolis, MN

VB.NET, ASP.NET, Microsoft SQL Server

- Added functionality to existing data-driven web application
- Built ASP.NET pages, via a VB.NET business logic layer, allowed users to view and interact with records in a SQL database
- Wrote SQL stored procedures to handle complex insertion and update logic

LEADERSHIP

PRESIDENT | ASSOCIATION FOR COMPUTING MACHINERY (ACM-W)

May 2017 - May 2018 | Univ. of Minnesota Womens Chapter

- Managed team of 15 officers, leading weekly meetings & overseeing all chapter business (including event planning, marketing, budget, recruiting, relationship management, etc.)
- Created and executed aggressive, multi-faceted strategy to grow chapter, resulting in 10x increase in membership in one year