

# ALEXANDER D. PATEL

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alexdpatel.github.io

## Education

*University of Minnesota Twin Cities*

*September 2017 - May 2020*

B.S. in Computer Science

GPA: 3.64 / 4.00

CSE Dean's List: Fall 2017, Spring 2018

Coursework: Advanced Algorithm's and Data Structures, Practice of Database Systems, Computational Genomics, Programing Graphics and Game Design, Intro to Artificial Intelligence, Advanced Programming Principles, Machine Architecture, Intro to Operating Systems, Program Design and Development, Computational Linear Algebra

## Industry Experience

*Certified Cirrus Controls | Software Engineering Intern*

*January 2019 – Present*

- Planned and designed a .NET WPF application. Application was created with the MVVM design pattern to make the project easily extendable. Application was able to create PDF's containing pertinent information for the engineering and internal sales teams.
- Engineered software using the SuiteTalk api to upload quotes and associated items to the NetSuite ERP
- Adapted Delphi code into C #

*Digital Forces | Software Development Intern*

*June 2018 – August 2018*

- Used GPIO to monitor changes of digital input on a Raspberry PI and log change to Google Sheets
- Designed software to determine asphalt loading conditions using multiprocessing, I2C, and requests to simultaneously monitor a thermal sensor and upload the data to an IOT Database
- Presented solutions to latency issues, Researched IOT databases and license plate recognition software

## Leadership and Activities

*ACM | Member*

*September 2017 – Present*

- Volunteered at annual MINNEHack

*F.L.O.A.T | Program Coordinator*

*August 2018 – Present*

- Coordinate the educational and informational events for the club

*DECA | President*

*October 2015 – May 2017*

- Integrated technology into DECA business organization by developing a website for members
- 2-time international level competitor (2016, 2017)

## Projects

*Traveling Salesmen | C*

- Created a genetic algorithm to determine the shortest path between n points, and experimentally modified constants to achieve a 90% accuracy in 2 second run time for 25 cities.

*Chess AI | Python*

- Implemented an AI using a Monte Carlo tree search algorithm

*alexdpatel.github.io | HTML / CSS*

- Created a personal website to host some interactive graphics projects and games such as 2048

## Skills/Frameworks

*Proficiency:* Java, Python, C, C++, C#, JavaScript, P5, Processing, git, OCaml, WPF, Visual Studio

*Exposure:* MATLAB, Node JS, R, Git, TensorFlow, Requests, HTML / CSS, Subversion, SQL, Forms, .NET, Delphi, CMake, MinGfx