# Rinkal Agrawal

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## **EDUCATION**

## **EXPERIENCE**

### B.S. IN COMPUTER SCIENCE

May 2017 Graduate | CGPA: 3.64/4.0 Dean's List recipient for all semesters

## **SKILLS**

## **LANGUAGES**

Java • Typescript • Python • C# • Swift MySQL • HTML5 • CSS3 • JavaScript C/C++

#### **FRAMEWORKS**

Angular 6 • Node.js • PyTorch • Express.js Bootstrap4 • MongoDB • .Net • iOS App Development

## STRONG KNOWLEDGE

Microservice Architecture • REST API's Unit Testing • Product Ownership • JSON • Github • Agile Methodology • Tomcat • Eclipse • React

#### WORKING KNOWLEDGE

Neural Networks(MLP, CNN, RNN) • Anaconda • RabbitMO • AWS • Twilio API's • Firebase • Google Cloud • MVC • MVVM • PHP Multi-threaded Programming

## RESEARCH

### UNDERGRAD RESEARCHER

U of M Software Engineering Center Aug '16 - Dec '16

• Worked on a NASA project under Prof. Sanjai Rayadurgam to display the autonomous applications of a quad copter drone by using a pix hawk hardware with tweaked octocopter software.

## COURSEWORK

Advance Algorithms and Data structures Software Design and Development Artificial Intelligence

## INTERESTS

**Internet Programming** 

- Mentoring students with CoderDojo
- Local networking events
- Roadtrips and Hiking

## UNIVERSITY OF MINNESOTA SOFTWARE ENGINEER II

Software Engineer I CenturyLink

Nov '18 - Present June '17 - Nov '18

- Built a data-driven application using Angular6, and Java on node.js to provide a front-end for inventory, leading to 40% less error tickets over 6 months. As a product owner, decided feature directions, worked with users to gather requirements and feedback.
- Implemented an automation solution in Java for SD-WAN technology by working with different business units, resulting in decrease in device activation time from 30+ minutes to just over 2 minutes.
- Built a server-side routing engine using javaScript and json on express.js to route the incoming traffic based on the request, resulting in over 20% decrease in client
- Increased the legacy server engine efficiency by 4 folds by rewriting the algorithm using SNMP technology.

#### SOFTWARE DEVELOPER INTERN

Design Ready Controls Inc.

June '16 - June '17

- Worked on windows desktop applications using C# and .Net that helped electrical engineers better and faster design control panels, reducing the panel delivery time by almost 20%.
- Designed and implemented the UI for the android app for an R&D project that let users see the field sensors data in real time using AWS.

## PRO JECTS

#### **SPY** | A WEB APP FOR MONITORING TEAM'S SUCCESS

Independent project, 5 weeks

| Angular6, Java

- Designed and built the app to let team members post their project successes.
- Lets other people within the company view posted achievements and other project related statistics from an elegant dashboard.

## ROUTER MODEL | DL MODEL TO PREDICT ROUTER FAILURE

Personal work project, 6 weeks

| Python, PyTorch

• Designed a deep learning model using neural networks to predict the probability of a router port failure in the production using company's inventory data.

## **VIDEO MESSENGER** | A Web app for hearing impaired students

Non-Academic Project, 4 months, team of 4

| React

• Designed and built to conduct an on-line class of hearing impaired students by implementing video messaging recorded in sign language to help improve their university experience.

## **BITCOIN TRACKER** I AN IOS APP FOR TRACKING BITCOIN PRICES

Independent project, 3 weeks

Swift, MongoDB

• Designed to track bitcoin prices and it's market demand. Added a feature to provide customized notifications based on the user filled price range.

### LANGUAGE TRANSLATOR | CDAL TO C++ CODE TRANSLATOR

Academic Project, 4 months, team of 2

| C++

• Built a compiler to translate 'Climate Data Analysis Language' code into C++ code using regular expressions. Extensively utilized unit testing to verify correctness.