

# Maruf Ahmed

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## EDUCATION

### BOISE STATE UNIVERSITY





HONORS COLLEGE

BS IN COMPUTER SCIENCE

EXPECTED GRADUATION DEC 2021

GPA: 3.5

## FIND ME

 [marufahmed.us](https://marufahmed.us)  
 [linkedin.com/in/mrfahmd](https://linkedin.com/in/mrfahmd)  
 [github.com/marufahmed](https://github.com/marufahmed)  
 [public.tableau.com/profile/maruf.ahmed](https://public.tableau.com/profile/maruf.ahmed)

## COURSEWORK

Algorithms  
Digital Systems  
Data Structures  
Microprocessors  
Web Development  
Database Systems  
Agile Development  
Operating Systems  
Artificial Intelligence  
Software Engineering  
Discrete Mathematics  
Systems Programming  
Probability and Statistics  
Technical Communication  
Mobile App Development  
Network Security and Defense  
Data Visualization and Analytics

## SKILLS

### Programming

• Java • PHP • Python • Kotlin • C

### Web

• JavaScript • HTML5 • CSS • Bootstrap  
• Tailwind • Vue.js • Nuxt.js • React  
• jQuery • D3.js • Google Optimize  
• Google Analytics • Google Tag Manager

### Data

• MYSQL • MSSQL • SSRS • SSIS  
• Tableau • PowerBI • XML • JSON  
• ETL • Data Warehouse

### Methodologies

• Object Oriented Programming  
• Agile Development • Version Control

## EXPERIENCE

### METAGEEK | INDEPENDENT CONTRACTOR - WEB DEVELOPMENT

May 2021 – Present | Boise, ID (Remote)

- Created variations of existing web pages for running split testing experiments.
- Worked with the marketing team to create new content pages.
- Moved existing web content (educational pages, product pages) from Middleman to our modern Vue.js-based architecture (nuxt.js).
- Worked closely with designers to take wireframes and mockups from conception to implementation on a Nuxt.js web framework.
- Implemented on-page and technical SEO in web pages.

### SMART INFRASTRUCTURE RESEARCH LAB | UNDERGRADUATE RESEARCH ASSISTANT

May 2017 – March 2021 | Boise, ID

- Worked under direct supervision of Dr. Yang Lu and Dr. Dianxian Xu for several ongoing funded projects on utilizing Artificial Intelligence to make smarter infrastructures.
- Trained a neural network model with TensorFlow based on Single Shot Multibox Detector architecture for pavement surface crack detection.
- Achieved 96% prediction accuracy for detecting pavement cracks.
- Designed and built a small scale autonomous vehicle platform equipped with Nvidia Jetson TX2 for data collection and real-time inference for pavement crack detection.
- Developed an android application that communicates with molecular sensor via Bluetooth and sends collected data to cloud server for analyzation.

## PROJECTS

### COLLEGE EXCHANGE | WEB DEVELOPMENT

Sept 2018 – Oct 2018

Created the website as a part of web development coursework. It is an open source online platform where college students can trade in their items. Created the website using PHP, HTML, CSS, SQL, jQuery, AJAX and javascript.

### PORTFOLIO | DATA VISUALIZATION

Oct 2018 – Present

Developed several visual analytics dashboards using both Microsoft PowerBI and Tableau for personal interest. Used M and DAX query languages for data transformation and expression calculations.

## AWARDS

2018	Academic	Research Experience for Undergraduates Fellowship
2017	Academic	Dean's List (Fall 2016, Spring 2017)
2016	Merit based	Brown Honors Scholarship (awarded to 11 recipients each year)
2016	Merit based	GEM Nonresident Scholarship

## SOCIETIES

2018	Boise State	Artificial Intelligence Club
2016	Boise State	Creative Technology Association
2016	Boise State	Honors College Student Association
2016	National	National Society of Collegiate Scholars