

# MOHAMMAD M. AHMAD

105 N Busey Avenue, Apt 104, Urbana, IL 61801 · mmahmad3@illinois.edu · (617) 909-4234 ·  
https://mmahmad.dev

## EDUCATION

<b>University of Illinois at Urbana-Champaign</b> Master of Computer Science <i>GPA: 3.83</i>	Urbana, IL Aug 2018   Dec 2019
<b>National University of Sciences and Technology</b> Bachelor of Science, Computer Science <i>GPA: 3.55</i>	Islamabad, Pakistan Sep 2013   Jun 2017

## WORK EXPERIENCE

<b>Nutrien Ag Solutions, Inc</b> <i>Software Engineer Intern</i>	Champaign, IL June 2019   Present
<ul style="list-style-type: none"><li>• Dockerized application to aid local development and replicate test/prod environments</li><li>• Integrated Sentry, a tool to monitor and alert developers about crashes in real time</li><li>• Migrated codebase from Python 2 to Python 3 while maintaining backward compatibility</li><li>• Collaborated with DevOps to create a separate developer pipeline for agile development</li><li>• Re-architected application to follow object-oriented design and principles</li><li>• Increased unit test code coverage by <math>\sim 45\%</math> to make application robust and fault-tolerant</li></ul>	
<b>Techlogix</b> <i>Software Engineer</i>	Karachi, Pakistan July 2017   May 2018
<ul style="list-style-type: none"><li>• Developed the front-end of atEvent, an enterprise web product, in Angular 4/5</li><li>• Supported the back-end team by developing CRUD REST APIs based on the Spring framework</li><li>• Coordinated with various offsite teams to develop, review progress, and address any concerns</li><li>• Awarded Achiever of the Month within the first 6 months of employment in recognition of hard work and dedication</li></ul>	
<b>TUKL-NUST</b> <i>Research Intern</i>	Islamabad, Pakistan Jun 2016   Aug 2016
<ul style="list-style-type: none"><li>• Applied transfer learning to build a neural network for Urdu OCR, accurate to 90+%</li><li>• Evaluated accuracy of trained model with filtered images</li></ul>	
<b>Bitsym</b> <i>Software Engineer Intern</i>	Islamabad, Pakistan July 2016   Aug 2016
<ul style="list-style-type: none"><li>• Prototyped Android application to track Bluetooth-based iBeacons, used to find lost items</li><li>• Set up Parse BaaS to store beacon data and communicate with the app</li></ul>	

## PROJECTS

<b>Crane Python</b> A faster distributed computation system for small-scale input data, inspired by Apache Storm. Our system was 35% faster than Apache Spark SQL
<b>Track My Meds Alexa Skills Kit SDK, NodeJS, JavaScript</b> An Alexa skill to set customized, recurring medication reminders and track drug usage
<b>AssemSure Python</b> A machine learning model to improve and automate quality assurance on assembly lines by predicting potential product failure, accurate to 85+%

## SKILLS

General Programming Languages:	Python, Java
Web Development:	HTML, CSS, JavaScript, Angular 4/5, Spring
Mobile App Development:	Android SDK, Ionic 3 (cross-platform for iOS and Android)
Smart Assistant:	Amazon Alexa Skills Kit SDK
DBMS:	MySQL, SQLite, PostgreSQL, MongoDB, Neo4j
Cloud:	AWS (EC2, Elastic Beanstalk, S3, RDS), Google Cloud Compute
Tools:	Docker, Git, JIRA
Operating Systems:	Linux, macOS, Windows, Android, iOS