Mohammad M. Ahmad

813 W Springfield Ave, Urbana, IL 61801 · mmahmad3@illinois.edu · (617) 909-4234 ·
https://mmahmad.dev

Education

University of Illinois at Urbana-Champaign — Urbana, IL
Master of Computer Science *GPA: 3.83* — Aug 2018 | Dec 2019

National University of Sciences and Technology — Islamabad, Pakistan
Bachelor of Science, Computer Science *GPA: 3.55* — Sep 2013 | Jun 2017

Work Experience

Nutrien Ag Solutions, Inc — Champaign, IL
Software Engineer Intern — June 2019 | August 2019
- Dockerized application to aid local development and replicate test/prod environments
- Re-architected Python application to follow object-oriented design and principles
- Increased unit test code coverage by ∼45% to make application robust and fault-tolerant
- Migrated codebase from Python 2 to Python 3 while maintaining backward compatibility
- Integrated Sentry, a tool to monitor application crashes in real time and alert developers
- Collaborated with DevOps to create a separate development pipeline for agile s/w development

Techlogix — Karachi, Pakistan
Software Engineer — July 2017 | May 2018
- Developed the front-end of atEvent, an enterprise web product, in Angular 4/5
- Supported the back-end team by developing CRUD REST APIs based on the Spring framework
- Coordinated with various offsite teams to develop, review progress, and address any concerns
- Awarded Achiever of the Month within the first 6 months of employment in recognition of hard work and dedication

TUKL-NUST — Islamabad, Pakistan
Research Intern — Jun 2016 | Aug 2016
- Applied transfer learning to build a neural network for Urdu OCR, accurate to 90+%
- Evaluated accuracy of trained model with filtered images

Bitsym — Islamabad, Pakistan
Software Engineer Intern — July 2016 | Aug 2016
- Prototyped Android application to track Bluetooth-based iBeacons, used to find lost items
- Set up Parse BaaS to store beacon data and communicate with the app

Projects

Crane *Python*
A faster distributed computation system for small-scale input data, inspired by Apache Storm. Our system was 35% faster than Apache Spark SQL

Track My Meds *Alexa Skills Kit SDK, NodeJS, JavaScript*
An Alexa skill to set customized, recurring medication reminders and track drug usage

AssemSure *Python*
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, PostgreSQL
Cloud:	AWS (EC2, Elastic Beanstalk, S3, RDS), Google Cloud Compute
Tools and Technologies:	Docker, Git, JIRA
Operating Systems:	Linux, macOS, Windows, Android, iOS