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Mercer Island, WA 98040

Mohammad Ahmad

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Employment

Software Development Engineer	Amazon Web Services, Inc	Mar 2020 – Present
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- Improved batch job success rate by $\approx 10\%$ by switching PII redaction provider service to one which allowed more control over the input
- Collaborated with 2 teams to detect call-drivers in shorter text segments, improving customer perceived latency in real-time system by $\approx 70\%$ and enabling a new AWS recommendation service to build on top of the system
- Developed the DAO classes and APIs to perform DDB CRUD operations for real-time sessions
- Integrated the front-end and control-plane for post-stream analytics of real-time sessions
- Developed operational metrics (e.g. oldest queued jobs, pending jobs/sessions, etc) and scripts to automate ops investigations and cleanup

Software Engineer, Intern	Nutrien Ag Solutions, Inc	Summer 2019
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- Re-architected Python application to follow object-oriented design and principles
- Increased unit test code coverage by $\approx 45\%$ to make application robust and fault-tolerant
- Dockerized application to aid local development and replicate test/prod environments
- Migrated codebase from Python 2 to Python 3 while maintaining backward compatibility
- Integrated Sentry, a 3P 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

Software Engineer	Techlogix	July 2017 – May 2018
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- 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

Education

Urbana, IL	University of Illinois at Urbana-Champaign (UIUC)	Fall 2018 – Dec 2019
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M.S. in Computer Science. GPA: 3.83

Islamabad, Pakistan	National University of Sciences and Technology	Fall 2013 – June 2017
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B.S. in Computer Science. GPA: 3.55

Technical Projects

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

Additional Experience

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- **Harvard in Tech Seattle (May 2021 - Present):** Volunteer SWE, leading a team of 10 other volunteers

Languages and Technologies

Kotlin, Python, Java; AWS (EC2, Lambda, S3, Step Functions, SQS, etc.); Angular, Spring; DynamoDB, MySQL, PostgreSQL