

Abdul Khaliq Zaheer

73 Martin Ave SE
Atlanta, GA 30315
404-694-8073

<https://github.com/abdulbeard>
<https://abdulkhaliqzaheer.com>
abdulkhaliqzaheer@gmail.com

Objective: Pursue employment as an application architect, with a focus on design best-practices and architectural elegance

SKILLS

Languages: C#, LINQ, TypeScript, SQL, Java, Javascript, HTML, CSS, XPath, JSONPath, Ruby, C
Tools: ELK, Chef, Jenkins, Openshift, Docker, Powershell, JMeter, PerfMon, SonarQube, OpenCover, Git, TFS
Frameworks: ASP/.NET (+Core), NET Standard, Angular6, SignalR, WebApi, MVC, MSSQL, PostgreSQL, Helm, Harness.io
Public Cloud: **MS Azure** [Storage (Table, Blob), CDN, VMs, Redis, Cognitive Services, SendGrid, functions], **GCP** [functions]

WORK EXPERIENCE

NCR Corporation

Atlanta, GA

Software Engineer III (*Omni-Channel Platform - DevEx Team*)

Mar 2018–Present

- ◇ Designed and delivered phase 1 of a multi-tenant delivery application (**JAVA Springboot**) for hospitality & retail customers
- ◇ Proved the concept of a multi-tenant menu-maker application (**Angular6**) and gave the project momentum to thrive
- ◇ Provided guidance on migrating to Apigee and GCP from a proprietary api gateway and platform services
- ◇ Created a **Jenkins, Harness.io, Openshift CI/CD** pipeline with **Docker** images of our admin app & deployed to production

Software Engineer II/Dev Lead (*Online Ordering - Core Team*)

Apr 2015–Feb 2018

- ◇ Wrote a highly-scalable, SOLID-inspired REST API to communicate with thousands of restaurant Point-Of-Sale systems
- ◇ Reduced app inefficiencies by up to **2x** through bottleneck and hotspot profiling, and code refactoring
- ◇ Load tested our app using **Powershell, JMeter, PerformanceMonitor**, and a **C#** console application to determine load points, with run-over-run statistical analysis, and forecasts for scale requirements to handle upcoming load events
- ◇ Improved app performance by **15x** by switching the inter-server communication protocol from **WCF** to **WebApi-Protobuf**, adopting asynchronous programming, and introducing multi-layer, distributed caching
- ◇ Enhanced error tracking by introducing correlation-id logging and championing **ElastAlert** monitoring for **ELK**
- ◇ Migrated UI assets to a CDN and added caching, reducing server load, improving scalability and user experience
- ◇ Solidified app security around authn and authz by designing and implementing an **OAuth** token exchange with custom claim validation, 2-Factor Authentication with **TOTP**, **reCaptcha** verification, and adopting **PBKDF2** for password-hashing

Software Engineer I (*Online Ordering - Roadmap Team*)

Jun 2013–Mar 2015

- ◇ Parallelized a daily data import service for thousands of restaurants, handling errors and status notifications

PROJECTS & TINKERING

- ◇ Wrote the backbone of a swipe-right-or-left food rating and ordering application for meals near you (**ASP.NET Core 1.1**)
- ◇ Created a data-analytics app that reconciles fragmented guest user information into a comprehensive customer (**.NET**)
- ◇ Designed and soldered an **IoT** logic board integrating a RaspberryPi 2 and a set of traffic lights to show **Jenkins** build health
- ◇ Learned about **CV** by drawing a track on the floor, and “driving” an RC-car with a camera-mounted RaspberryPi
- ◇ Authored an Azure function that emails subscribers every time the weather forecast shows temperatures below freezing, using **Weather.gov apis**, **Google charts**, **Azure Storage** and **Azure Functions**
- ◇ Developed an **Angular6** app to save, tag and analyze receipts from a user’s expenses, using **Azure Cognitive Services (OCR)**, **US Census Geocoding API** and **Google Places API**
- ◇ Used **dotnet/reactive** to create a library that can create, manage, and persist reactive Finite State Machines
- ◇ Created a **.NET Core** console app to control a smart-bulb (TPLink LB130), with future plans to sync it with music
- ◇ Built a monkey-testing library in **.NET Standard** for **XUnit**, **NUnit** and **MSTest** to monkey-test code with loads of unique, edge-case arguments that are often problematic

EDUCATION

B/S Computer Science & B/A Biology

Emory University, May 2013

RECOGNITION

Publication: (Pubmed, 24068758) *In vivo electrophysiology of nigral and thalamic neurons in α -synuclein-overexpressing mice...*

Patents: (Pending) **GeoFenced Promotions** — Enrich promotions by assigning them a geofence for better targeting and analytics

(Pending) **Voice-Assistant Item Lookup** — Lookup an item in store inventory through your phone’s voice-assistant

MISCELLANEOUS

Languages: Fluent in English, Urdu, Hindi and Punjabi; basic fluency in Arabic

Interests: Philosophical Discourse, Fantasy Fiction, Ping Pong, Soccer, Iron Maiden, Levon Minassian (Duduk) & Sigur Rós