HILLOL DEBNATH

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AT A GLANCE

- More than 5 years of industry experience (Mobile development, back-end)
- Experienced in React Native, Android, AWS, API design, Distributed Systems
- PhD in Computer Science. Published several papers in conferences and journals. Worked as peer reviewer in Elsevier PMC journal, IEEE Mobile Cloud, etc.

SKILLS (LANGUAGES AND TECHNOLOGIES)

- Most proficient: Java, Kotlin, Typescript; Working experience: Python, C++, C
- Tools and frameworks: React Native; Android; AWS Lambda, API Gateway, EC2, Cloudwatch, ECS, DynamoDB; MySQL, git, Android Studio, Hadoop

EMPLOYMENT

Software Development Engineer	**Amazon**	**September 2017 - Present**

- **Amazon Halo (HomePage):** As a founding member of the team, I lead and contributed in building the new feed based home page of Amazon Halo. This work consists of two pages that every Halo users see they open the app. All results and data presentation of users' biometrics happen in these two pages. My contribution was in the initial design and then building several reusable UI components and logic for domain teams, metric emission for powering the operational dashboarding/monitoring. Technologies: Typescript, React Native, Kotlin, AWS Lambda, ECS, API Gateway, Cloudwatch.
- **Amazon Halo (Body):** *Halo Body* uses cutting edge technology to measure body fat percentage of users using Smartphone camera. I worked in both front end and back end for delivering the body scan mechanism. Contributed in Android performance improvement, privacy, and lots of user facing front end work. Also built a query resolver for Alexa which serves all Alexa customers inquiring about their Halo Body results. Technologies: AWS Lambda, DynamoDB, Cloudwatch, React Native, Typescript, Kotlin, Android
- **Amazon Halo (Activity):** Built the infrastructure and contributed in developing the activity score calculation logic for Halo users. Technologies: AWS Lambda, DynamoDB, Python
- **Amazon Kids+:** Worked on back-end services in *Alexa for Kids* team. My contribution was in a service used for controlling parent dashboard. Technologies: Amazon's internal service framework, Java

Software Engineer, Intern	**Wickr Inc**	**Summer 2014**

Wickr Messenger App: Designed and implemented the networking module of Wickr's Android app.

Research Assistant	**New Jersey Institute of Technology**	**Spring 2015 – Summer 2017**

- **Sentio:** Designed and developed a middleware + SDK which collectively utilize sensors from all smart devices available to a user. Technologies: Java, Android; Android Wear
- **Avatar and Moitree:** A distributed mobile-cloud platform for running collaborative apps on mobile. I have designed, implemented the middleware and a programming framework. Java; Android; KVM; Openstack

Teaching Assistant	**New Jersey Institute of Technology**	**Fall 2010 – Fall 2014**

- Worked as an instructor in undergrad-level programming courses including Java, Matlab, and C++.

Senior Member, R & D	**Commlink Info Tech Ltd.**	**Feb 2008 – Aug 2010**

- Velacore ERP: I have implemented user interfaces, business logic, and back end of Human Resources, Accounting, and Inventory modules. Technologies: Java EE 5; EJB; JPA; MySQL; Glassfish

EDUCATION

Newark, NJ	**New Jersey Institute of Technology**

- Ph.D. in Computer Science, July 2017. GPA: 3.75
  - Research topic was mobile distributed systems (Google scholar profile)

Dhaka, Bangladesh	**Bangladesh University of Engineering & Technology**

- B.Sc. Engineering in Computer Science and Engineering, January 2008. GPA: 3.57

AWARDS AND OTHERS

- **Media Coverage:** My research project, FaceDate was covered in: ABC News, The Verge, FoxNews, nj.com, NJ Business Mag, Phys.org, EurekAlert, and many other media outlets.