AAKASH SHAH

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EDUCATION

The George Washington University (GWU), Computer Science - Machine Learning   **Washington DC, USA**
Master of Science (GPA: 3.5)   *Aug 2016 – May 2018*
- **Relevant Courses:** Big data & analytics · Advanced software paradigms · Design and analysis of algorithms · Linear Algebra for ML · Probability for ML · Natural Language Processing with IBM Watson
- International student ambassador · Global tuition fellowship · Research assistant
- Taught **core computer science fundamentals** and hosted remedial sessions for undergraduate athletes.

SRM University, Computer Science & Engineering   **Chennai, India**
Bachelor of Technology (GPA: 3.3)   *Aug 2011 – Jun 2015*
- **Relevant Courses:** Databases · Android Studio · Software design · Computer Architecture · Computer security
- Co-convener quiz club · Head of Pixellete (Student incubation center)
- Led a team of 5 developers and designers in the university based incubation center.

TECHNICAL SKILLS

- **Languages**: Proficient: Python3, JS, Java(J2EE) Prior Experience: C, C++, R, HTML, CSS, Scala
- **Machine Learning:** Tensorflow, Sklearn, NLTK, Core NLP
- **Server-side Development**: Java Spring, Flask, Node.js
- **Frontend Development:** React and Redux
- **Databases**: MongoDB, SQL (MySQL, PostgreSQL, Oracle)

- **Software Engineering**: JUnit, MVC, OO Design Patterns, SOLID Principles, Git, Agile, TDD, Pair programming
- **Operating Systems**: Unix/Linux, Windows
- **Other Skills**: HTTP/RESTful APIs, JSON, K8s, Dockers, AWS S3 | Lambda | Route 53 | EC2, Cloudera, Nginx, Python Automation, PowerBI, Wireshark

WORK EXPERIENCE

IQVIA, Tech Lead   *May 2020 - present*
Part of the analytics team responsible for designing and developing financial applications.
- **Development:** Involved in developing full stack applications (**Flask** & **React-Redux**) along with system design, UX design and shadowing business users to align the product to suit the needs of our users.
- **Data Science:** Partook in model designing and constraining the model with business requirements. Took initiative to break the siloed black box modeling strategy and added explainability modules to our system forecasts. Submitted designs for models that can run scenarios, simulations and meta data KPIs.
- **MLOps Advocate**: Advocating, prototyping and engaging in talks with vendors and data scientists to set up a dedicated MLOps playground with GPUs for developers and data scientists to streamline model development to deployment lifecycle.
- **Mentorship**: Mentored team mates and helped them hoan their strengths and skills. Made significant contributions to inner sourcing to abstract core utility frameworks in their standalone libraries available for use by other teams.

IQVIA, Software Engineer 2   *Mar 2019 - May 2020*
Part of the analytics team responsible for optimizing costs of clinical trials using machine learning.
- **Development:** Involved in developing full stack applications (**Flask** & **React-Redux**) and writing code for deriving ML model's accuracy and other key performance indicators.
- **Platform Owner**: Responsible for managing the K8s cluster and CI/CD pipelines, Database integration and migration, Writing JIRA stories, Datadog monitoring.
- **COVID19 Recovery Prediction:** Volunteered in developing a spotfire dashboard using SIR (epidemiological) model to derive the recovery curve of study sites. The curve was used in estimating cash flow, plan subject visit schedules and budgeting.

KORE.AI, Solutions Engineer   *Dec 2018 - Mar 2019*
Part of the chatbot development team at Kore along with handling solutions for a variety of clients.
- **Client Interaction:** Provided detailed walkthrough of chatbot development toolkit and presented the chatbot solution to tech giants like eBay and Box Inc in the bay area.
- **Chatbot Development:** Involved in writing code (**Javascript** and **Chatscript**) for Kore.ai's corporate assistant chatbot called kora.ai. Added routines for scheduling meetings, improved intent recognition and optimized user interaction by two folds.
- **Hubspot Automation**: Managed the startups hubspot deals and derived insights like sales funnel, successful conversions using **HubSpot API** and **Google App Scripts** on Google Sheets.

INTERNATIONAL FINANCE CORPORATION (World Bank Group), Python Developer   *Aug 2018 - Dec 2018*

*The **Corporate IT Service Quality (CITSQ)** team at IFC assures high-quality software for creating global economies.*
- **Process Improvement:** Developed a **python** tool (using **pandas**, **matplotlib**, **excelengine, tkinter**) to automate the testing infrastructure for the *CITSQ* team. The tool also includes QA reporting and analytics; which eliminated the need to maintain multiple scripts and excel files; reduced task completion time by 60%.

ENCIRCLE.IO, Software Developer   *Aug 2015 – May 2016*

*A SaaS **IoT** infrastructure built in **Java** to enhance the retail experience by tapping potential window shoppers w/ Bluetooth beacons*
- **Innovation:** Contributed production level java code for building location features using **Spring Boot** and customized Wi-Fi routers for check-in via a social network with **OpenWRT**; reduced bottlenecks; increased customer outreach by 30%

SOFTWARE DEVELOPMENT PROJECTS & RESEARCH

Verizon Chatbot, Proof of concept Independent Project   *Jul 2018*
- Built a chatbot to optimize process completion time. Compared **Watson AI** and **Kore.ai** platforms to create a dialog flow; added features for a family owner and to check data usage. Successfully prototyped a functional chatbot with **Spring** backend.

Replenisher Task List, Spring WebFlux Application Independent Project   *Jun 2018*
- A full stack application with task management for a large-scale store replenishment manager. Built a reactive web portal using **Spring WebFlux** & **React JS**; implemented a sorted priority queue data structure for tasks & other CRUD operations.

Two-alternative Forced Choice Test, Psychology Department, GWU   *May 2017 – Dec 2017*
- Developed a psychometric (2AFC) test for determining patterns in human perception of the correlation between light and surface area. Redesigned **Quest** (**MATLAB** tool - part of **Psychtoolbox**) in **JavaScript** and hosted on **Mechanical Turk**.

CRM Project Development, Pixellete   *Apr 2013 – Dec 2014*
- Led a team of 5 developers and designers to develop small-scale CRM applications. Developed scalable **MVC** web apps using Yii 2.0 (PHP5) and MySQL. **Launched Products:** Gripstreet.co | PlacementTrove | Laidlaw design and more

AWARDS & ACHIEVEMENT

Devfest DC Google Cloud Hackathon: Winner (2018) • **SESCON Hackathon:** Winner (2014) • **Blitz Chess:** Winner (2013)