SIDDHARTH KUMAR

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EDUCATION

ARIZONA STATE UNIVERSITY Tempe, Arizona
M.C.S Computer Science *August 2018 – May 2020*
Courses: Distributed Software Development, Mobile Computing

VISHWAKARMA INSTITUTE OF TECHNOLOGY Pune, India
BTech Computer Science and Engineering | GPA: 3.89 / 4 *July 2011 – May 2015*

PROFESSIONAL EXPERIENCE

VERITAS TECHNOLOGIES Pune, India
Cloud Software Engineer | NetBackup Cloud Storage Team *June 2015 – June 2018*

Project: Distributed Multi-Cloud Storage *(Skillset:* AWS S3, Python, Java Spring)

- Enable the user to immediately choose and switch cloud providers without any data backup or replication by developing a **distributed multi-cloud storage** which splits data across *n cloud providers* and retrieves data immediately from n-1 providers.
- Presented this project to **Veritas's Chief Product Officer** (CPO).
- Received a Veritas Performance Award for **innovation**.
- **Presented a paper** on Distributed Multi-Cloud storage at Technical Conference Veritas **Illuminate 2017**.

Project: Commercial Cloud Services (C2S) simulator of AmazonGov provider *(Skillset:* AWS SDK, Java, REST Services)

- **Subject Matter Expert** (SME) of in-house Commercial Cloud Services (C2S) simulator, a private - public certificate authentication system of AmazonGov cloud provider for NetBackup users.
- Advised multiple products in setting up the simulator and incorporating necessary code changes for **multiple products.**
- Received a Veritas Performance Award for **cross product collaborations**.

Project: Data Deduplication Ratio Estimator *(Skillset:* C++, Java Spring, Deduplication)

- Created a data deduplication ratio estimator by running a sampling algorithm of the data on NetBackup's Deduplication feature thereby helping understand infrastructure needs more efficiently and swiftly by estimating data size (TBs and PBs) pre-deduplication.
- Won a **runner up** prize for this project at Veritas's **Hackathon** competition.

Projects: Feature Developments in NetBackup *(Skillset:* AWS S3, Microsoft Azure Storage, OpenStack, CMCC, Symantec's Open Storage Technology (OST) API, Java Spring, REST services)

- Collaborated to a system which process, track, take snapshots, backup and restore large data sets of different types onto the cloud at a block level.
- Implemented a **proxy support** which would allow storage servers to communicate with the cloud through a proxy server. The proxy supported **SOCKS, HTTP** (with and without tunneling) along with a BASIC or NTLM authentication model support.
- Enabled NetBackup storage servers to use **OpenStack cloud storages** by tweaking the backup and restore algorithm to **use OpenStack APIs** when pushing, retrieving or deleting data from the cloud.
- Developed a **simulator** which was used to test NetBackup cloud services for **multithreading issues**. This helped in solving various customer escalations and unearthing various corner cases which were faced by customers.
- **3 Veritas Performance Awards** for team contributions, handling customer escalations, cross product collaborations.

QUODEIT *(Skillset: Python, Django, AJAX, JavaScript* Pune, India
Co-Founder | Website: https://www.quodeit.com *January 2014 – May 2017*

- Developed a **Python** (backend), **JavaScript** + **AJAX** (frontend) based online assessment platform helps recruiters to ease, automate their technical rounds like multiple choice and coding rounds for IT professionals.
- QuodeIt featured in the technical blog **TechStory**. *http://techstory.in/quodeit-prasad-lingawar/*
- The company was acquired by **SproutLogix** in June 2017.

NVIDIA CORPORATION *(Skillset: C, C++, LLVM, PTXAS Compiler, Perl)* Pune, India
Software Engineer Intern | Capstone Project *June 2014 – May 2015*

- Improved the register allocation execution time for **Nvidia's PTXAS** compiler on **Tegra GPU** architecture based mobile devices by 15% for 99.25% of the testcases using a **Partition Boolean Quadratic Programming (PBQP)** algorithm.
- Won a runner up prize at a departmental wide project competition, Prakalp.

OTHER WORK EXPERIENCE

ARIZONA STATE UNIVERSITY *(Skillset: Python, HTML5, JavaScript)* Tempe, Arizona
Student Software Engineer | Mobility Analytics Research Group *September 2018 – Present*

- Working on the PopGen project, a Synthetic Population Generator project in association with **University of Connecticut**.
- Improving Python based web application's frontend and backend code base.