|  | **Shakir James, PhD** | | |  |
| --- | --- | --- | --- | --- |
| **Employment** | | | | |
| **Software Dev Manager** | **Amazon Web Services (AWS)** | | | **Dec 2020–Present** |
| * Build AWS Accounts for all customers to create accounts and access other services. | | | | |
| **CTO** | **DTI Management** | | | **Nov 2017–Dec 2020** |
| * Restructure the engineering team into small crews: growing by ten times for a $300MM/year enterprise. * Implement agile dev processes: reducing the release interval from weeks to hours. * Design architecture for cloud migration: achieving 0% downtime for sales processing. | | | | |
| **CTO** | **1Ticket.com** | | | **July 2017–Dec 2020** |
| * Move to a serverless, microservice architecture on AWS: reducing infrastructure costs by 7.4 times. * Reduce the number of double sales across key marketplaces by five times: increasing revenue by 4 times. * Build an [infinitely scalable backend architecture](https://aws.amazon.com/blogs/startups/1ticket-leadership-on-scalability-automation-and-enabling-the-flip-economy/): increasing throughput from 2k tickets/hour to 200k/hour. | | | | |
| **Assistant Professor** | **University of the District of Columbia** | | | **Aug 2014–Aug 2018** |
| * Taught cloud computing: principles, algorithms, and tech (EC2, S3, DynamoDB, Hadoop, EMR). * Taught network security and cryptography: theory, implementation, and hacking with Python 3. * Taught advanced web development: techniques and technologies (React, Bootstrap, PHP, MySQL). | | | | |
| **Senior R&D Engineer** | **Observable Networks** | | | **Nov 2012–July 2014** |
| * Developed fast scalable data structures for big data analysis; reduced query time by 190 times. * Automated server provisioning and deployment on Amazon EC2; reduced install time by 10 times. | | | | |
| **Research Assistant** | | **Washington University in St. Louis** | **Aug 2006–Nov 2012** | |
| * Built a peer-to-peer app and protocol that reduced costly traffic and distribution time by 40 and 41 times. | | | | |
| **Technical Intern** | | **Intel Corporation** | **May 2008–Aug 2008** | |
| * Developed utilities and methods to analyze the I/O dependence of Intel x86-based Unix applications. | | | | |
| **Education** | | | | |
| **St. Louis, MO** | **Washington University in St. Louis** | | | **Aug 2006–Dec 2012** |
| * Ph.D. in Computer Engineering, December 2012. GPA: 3.6 * M.S. in Computer Engineering, May 2009. GPA: 3.6 | | | | |
| **Wichita Falls, TX** | **Midwestern State University** | | | **Aug 2002–May 2005** |
| * B.S. in Computer Science and Mathematics (Double Major), May 2005. GPA: 3.9 | | | | |
| **Technical Experience** | | | | |
| **Projects** | | | | |
| * **Open-source (2019).** Contributed to [AWS Serverless Application Model (SAM)](https://github.com/awslabs/serverless-application-model/pull/858) and [AWS CloudFormation](https://github.com/aws-cloudformation/custom-resource-helper/pull/4). * **Micro-framework (2019).** Built for serverless APIs: enabling local development. (Python, LocalStack) * **Bitmap Filters (2014).** Sped up query execution with in-memory data structures: compared to SQL, faster by 10–290 times. (Python, SQLAlchemy, Amazon S3, RedShift, Redis). | | | | |
| **Additional Experience and Awards** | | | | |
| * **Publications (2007–2013):** Wrote and published ten research papers. * **Chancellor’s Fellow (2006–2011):** Awarded a competitive five-year fellowship to complete Ph.D. * **Intel Goodie Drawer Award (2008):** Honored for delivering timely and relevant analyses. * **President’s Medal of Excellence (2005):** Won graduation medal for highest GPA in college.   See details in [my curriculum vitae](https://docs.google.com/document/d/1xuxv3dHy9uyCBJrYe1C6fJirFTQiYnyD7GO9jHy6lqc/export?format=pdf). | | | | |