

**Jaideep Ganguly, Sc.D**

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## Career Goal – Head of Engineering

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Innovative hands-on executive with the ability to dive deep. Results-oriented visionary with a distinguished track record in software engineering and machine learning. Strong track record of leading design and implementation of massively scalable and reliable software services. Ability to hire and retain world class talent in USA and India.

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## Technical Skills

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AWS, Dynamo DB, JVM, Java, Kotlin, Scala, Python, SciKit-Learn, TensorFlow, Keras, Deep Learning, Reinforced Learning, RDBMS, NoSQL, jQuery, Bootstrap.

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## Education

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**Doctor of Science**, from [Massachusetts Institute of Technology](#), 1989. Dissertation on *formalization, design and implementation of a knowledge based system for qualitative reasoning*. Pioneering contributions in Artificial Intelligence as applied to engineering design.

**Master of Science** from [Massachusetts Institute of Technology](#), 1986.

**Bachelor of Technology with honors** from [Indian Institute of Technology, Kharagpur](#), 1984.

Recipient of [Sir Dorabji Tata](#) award for academic excellence.

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## Experience

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### **Director of Software Engineering, [Amazon](#), Hyderabad**

**Jun-2017 to Present**

Leader of the FinTech team at Amazon which is responsible for computing payables to Amazon business partners worldwide which amounts to well over a hundred billion dollars. In depth experience in delivering software using Java, Kotlin, Scala and through large scale asynchronous computing. Deep expertise in building Machine Learning / Deep Learning models to detect fraud and outliers as well as detect patterns to derive tangible business insights.

Set up development centers in New Delhi, a 50 member site and Pune, a 20 member site.

### **Director of Software Engineering, [Amazon](#), Hyderabad**

**Sep-2010 to May-2017**

Responsible for complete engineering of a software stack that automatically handles service requests from over 3 million sellers on Amazon Marketplace without any human intervention. Technologies involved include machine learning and deep learning algorithms. Ability to meet stringent SLA and Amazon class scalability and reliability. Led distributed development teams across Detroit, Hyderabad and New Delhi. Earlier, responsible for Amazon Webstore engineering and large seller business which included Marks & Spencer. Under my leadership, M&S internet sales grew by 23% YoY to well over a billion dollars.

Set up a 45 member automation team focused on applying machine learning algorithms in Hyderabad.

**Jul-2006 to Aug-2010**

### **Director of Software Engineering, [Microsoft](#), Hyderabad**

Shipped multiple versions of Windows Server. Shipped Remote Desktop Services Gateway, a widely acclaimed component in Windows Server. The Gateway tunnels the Remote Desktop Protocol session using a HTTPS channel for increasing security of RDP Services by encapsulating the session with Transport Layer Security. Pioneered virtualization in the industry by enabling Integration with System Center Virtual Machine Manager (SCVMM) for Dynamic Placement of Virtual Machines. My team was the winner of Microsoft's coveted Worldwide [Engineering Excellence Award for Trustworthy Computing](#). Recipient of Microsoft Management Excellence Award.

Set up a 75 member Windows Server team in Hyderabad.

Head of Amdocs Product Development Organization in India. Amdocs is a leading provider of end-to-end software products for telecom providers operating in 50+ countries with over 250+ telco customers worldwide. Led a team of 200+ product developers for shipping multiple key components in Amdocs v7.0 product line which include Service Mediation, Clarify CRM, Content Broking and Monitoring & Control. Recruited top talent from India, USA and Israel.

Set up a 200 member product development team in Pune, India.

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**Recent Publications**

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1. [A Brief History of Machine Learning](#)
2. [Functional Programming – Design through Functional Composition & Monads](#)
3. [Machine Learning and the Grand Challenge](#)
4. [Functional Programming - Design through Functional Composition and Monads](#)
5. [The Perils of Concurrency](#)

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**Patents**

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1. Centralized management tool for remote presentation session server farms [US 8495193 B2](#)
2. Adaptable License Platform for Remote Sessions [US 20120079393 A1](#)

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**Invited Talks**

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- “Building Large Distributed Systems Using Functional Programming”, Grace Hopper, Bangalore, Nov 16, 2018.
- “Deep Learning in Computational Biology”, Dept. of Computer Science, IIIT Hyderabad, Nov 21, 2016.
- “Recurrent Neural Networks in Sequence Learning” at Dept. of Computer Science, IIT, Kharagpur, Nov 3, 2016.
- “Remote Desktop Virtualization”, international conference on SaaS, Oct, 2008 at Bangalore, India.
- “Microsoft Mobile Media”, 3GSM conference, Barcelona in Feb, 2007.
- Auto-ID conference for inaugural launch of RFID standards, Chicago, Nov, 2003.
- President, Software Exporters Association of Pune (SEAP), 2003-04.
- Adjunct Professor, IIT, Kharagpur, Sep-97 to Jan-98. Computer Aided Engineering, Graduate level course.
- “Qualitative behavior of engineering systems from structural descriptions”, Stanford University, 1989.
- Invited speaker on Expert Systems at Cornell University, 1987.

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**Hobbies**

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- Adventure driver, driven along Hindustan Tibet road from Kaza to Kunzum, Rohtang and to Manali.
- Avid pianist, enjoy playing light classical melodies.