

# Sampath Dechu

<https://sampathdechu.github.io>

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## SUMMARY

17 yrs of experience in design, build of software solutions with state of the art computational methods | Master of Science in Computer Engineering

- **10 yrs** of experience in developing software products with advanced computational methods e.g. *Numerical Optimization, Combinatorial Search, Statistical Modeling, Graph Algorithms*
- **6 yrs** of experience in developing software products with data-driven computational methods e.g. *Machine Learning, Artificial Intelligence, Natural Language Processing, Pattern Mining*
- **5 yrs** of experience in leading teams with diverse skills such as *data science, research, software development* with team sizes of 20.
- Designed and built **3 AI products** in collaboration with IBM BUs and clients and deployed in production
- Delivered **multi-million dollar** impact to IBM Automation offerings by adding research innovations as differentiation

## EXPERIENCE

### IBM RESEARCH | MANAGER - APPLIED AI

Aug 2014 – Present | Bangalore, IN

- Lead team of researchers, engineers to build cloud-native full stack AI applications for automation of enterprise operations.
- Project-1: Developed QA chatbot for assisting IT support agents to get answers to support queries. The asset has AI techniques for curating knowledge from documents and AI techniques for answering queries accurately. System won best deployed system award in IAAI-2018
- Project-2: Developed touch-less automation solution using multiple AI methods for automating invoice processing.
- Project-3: Developed AI techniques for process knowledge discovery and hotspot identification in business processes.

### IBM SYSTEMS LABS | SR. SOFTWARE ENGINEERING MANAGER

Jan 2008 – Aug 2014 | Bangalore, IN

- Managed team of software engineers to implement advanced statistical analysis methods to automate high performance micro-processor design process.
- Collaborated with IBM research to deliver industry first statistical performance analysis tool for microprocessors.

### EARLY STAGE STARTUPS | SR. SOFTWARE ENGINEER

May 2004 – Jan 2008 | San Jose, CA

- Worked in two startups to implement state of the art optimization algorithms for improving performance and area of digital circuits.

### MICRON TECHNOLOGY INC. | SR. SOFTWARE ENGINEER

May 2003 – May 2004 | Boise, ID

- Implemented multiple algorithms for parsing large circuit graphs and analysis of graphs.

## EDUCATION

### IOWA STATE UNIVERSITY

M.S IN COMPUTER ENGINEERING  
May 2003 | Ames, IA

### J.N.T.U

B.TECH IN ELECTRONICS &  
COMMUNICATION ENGINEERING  
May 2001 | Hyderabad, India  
Gold Medalist

## PATENTS &

## PUBLICATIONS

9 patents - Granted by USPTO  
8 patents - In process at USPTO  
10 papers - In applications of AI  
3 papers - In applications of optimization methods

## AWARDS

2019 - Outstanding Technical Achievement Award  
2018 - Outstanding Technical Achievement Award  
2017 - Asia-Pacific Tech Star Award  
2015 - Eminence and Excellence Award

## MOOC

- Deeplearning certification on Coursera  
- Natural Language Processing certification on Coursera  
- Machine Learning course by Andrew Ng  
- Machine Learning course by Dr. Yaser Abu-Mostafa

## EXPERTISE

Full Stack Application Development  
Data-driven computational methods  
Optimization  
Information Retrieval  
Natural Language Processing  
Microservices Architecture

## LINKS

Github:// [sampathdechu](https://sampathdechu)  
LinkedIn:// [sampathdechu](#)  
Twitter:// [@sampathdechu](#)

Detailed Resume: <https://sampathdechu.github.io>