

Binesh

Sadanandan

Sr. Principal Research Engineer

Contact

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LinkedIn

<https://www.linkedin.com/in/bineshk/>

WWW

<https://thedatasense.com>

Skills

Product Lifecycle Management

Excellent

Data Science and Visualization

Excellent

Connected Healthcare and IOT

Very Good

Statistical analysis

Very Good

Machine learning

Organized and dependable product development engineer successful at managing multiple priorities with a positive attitude. Willingness to take on added responsibilities to meet team goals. As a research engineer at Medtronic Surgical Innovation, I focus on improving the state-of-the-art in minimally invasive therapies by harnessing the data generated from conventional and non-conventional data sources.

As a Ph.D student at Secure and Assured Intelligent Learning Lab, University of New Haven, my focus is to improve state of the art in dynamic treatment planning systems for precision oncology using Reinforcement Learning Techniques to create equitable health care across the world.

Work History

2021-04 -

Current

Senior Principal Research Engineer

Medtronic, North Haven, CT

- ✓ Responsible for developing and overseeing scientific and clinical evidence strategies to support the development and advancement of best-in-class Surgical Staplers for MIS
- ✓ Collaborates, builds relationships, and communicates effectively with a large group of internal and external stakeholders in a rapidly changing landscape while managing the timely completion of deliverables
- ✓ Stay current with emerging data processing and analytical methodologies and technologies (e.g., deep learning, machine learning, big data, digital health) and evaluate the business viability of such technologies in developing Advanced Surgical Instruments.
- ✓ Maintains substantial knowledge of state-of-the-art principles and theories and contributes to scientific literature and vital scientific conferences, helping to build relationships with KOL advisors
- ✓ Serve in an advisory role to management to provide direction and guidance to teams to execute initiatives and programs. Presents statistical results to non-statisticians, exchanges information of facts, statuses, ideas, and issues to achieve the objective and influences decision-making.
- ✓ Experience in designing and building highly scalable and reliable data pipelines using BigData architecture (Dataiku, Python, Redshift/Snowflake)

Excellent

2015-11 -
2021-04

Principal R&D Engineer

Medtronic , North Haven, CT

- ✓ Support the R&D Team on Model-Based Enterprise Initiatives by designing and developing solutions leveraging best-of-breed technologies (cloud, high throughput event processing, data analytics, etc.)
- ✓ Led technical implementation teams in analyzing business requirements and contributed to the design of Solutions intended to address complex product development processes
- ✓ Key focus on medical device development efficiency

Software

Windchill/Integrity/Thingw
orx

Excellent

Tableau,PowerBI,Shiny,
Dash

Excellent

Programing Languages -
Java, Python, R

Excellent

Cloud Technologies - AWS
& Snowflake

Very Good

ETL Tools - Informatica
Cloud, Talend DI

Very Good

2012-11 -
2015-11

Technical Architect | Project Manager

Barry Wehmiller Design Group, St Louis, MO

- ✓ Architect Windchill and PTC Integrity Solutions to match Customer's business requirements.
- ✓ Architect IT Infrastructure to support large-scale PLM deployments
- ✓ Scope Study and Detailed Requirements Gathering (Product Development Process Assessment)

2009-01 -
2012-12

Infrastructure Engineer

EDS

- ✓ System administrator for Solaris boxes running Oracle databases and Windchill PDMLink
- ✓ Responsible for the User/Group Account Management.
- ✓ Ensuring server data backups are successful and restore data if needed.

2009-12 -
2012-11

Product Specialist

PTC

- ✓ Subject Matter Expert for the PTC Windchill Runtime and functionality architecture.
- ✓ Subject Matter Expert in File Vaulting and Content Replication.
- ✓ Assisting PTC's Platinum customers in planning, installing, and maintaining enterprise-level deployments.

2007-01 -
2009-01

Technical Associate

Birla Minacs

- ✓ Partner Technical Support for Intel Workstation Motherboards.

- ✓ Support field engineers with advanced "no boot" troubleshooting on Intel® Workstation Board
- ✓ Issues Handled - Speeding up MBX87 boot time, BIOS beep codes, Port 80h POST codes, Error: PXE-E61 media test failure

Education

2020-01 - Current	Ph.D.: Engineering And Applied Science - Machine Learning <i>University of New Haven - West Haven, CT</i>
2018-01 - 2019-12	<i>University of Connecticut</i> Masters in Advanced Analytics and Project Management with focus on Data Science and Machine Learning GPA - 3.92
2017-01 - 2018-12	<i>Udacity</i> Nano degree in Deep Learning Techniques. Completed projects in Deep Neural networks in classification and NLP
2004-01 - 2008-01	<i>Cochin University of Science and Technology</i> Bachelors in Electronics and Communication with focus on Digital Signal Processing GPA - 3.56

Certifications

2018-12	Tableau Desktop Specialist
2019-03	Data Science and Big Data Analytics: Making Data-Driven Decisions
2017-08	MIT - Introduction to Computer Science and Programming Using Python
2017-03	Udacity Nano Degree in Deep Learning Foundation
2015-06	ITIL® Foundation Certificate in IT Service Management
2014-02	dynaTrace Application Performance Monitoring