

NITHYASHREE SENGUTTUVAN

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PROFESSIONAL EXPERIENCE

Astrazeneca, Chennai, India — *Junior Engineer (Full time)*, June 2021 – August 2022

Oversaw quality and compliance in change and document management process associated with SAP (an Enterprise Resource Planning Platform) for pharmaceutical production process. Conducted Process Periodic Review in Jan 2022, Jul 2022 to ensure the smooth flow of work. Have experience with the Data Stewardship Platform, a data management software in a collaborative environment.

Skills: SAP ERP, Quality Assurance, Data Stewardship platform

Washington State University, Pullman, Washington — *Graduate Teaching Assistant (Part time)*, January 2023 – Present

Fall 2023: Grading assignments, proctoring exams and holding office hours for Cpts_484 Software Requirements - Prof. Bolong Zeng and Cpts_s 223 Advanced Data Structures C/C++ - Prof. Yan Yan.

Summer 2023: Researching on assignments revamping for Cpts_370 System Programming Java - Prof. Jeremy Thompson

Spring 2023: Grading assignments, proctoring exams and overseeing lab activities for Cpts_370 System Programming Java - Prof. Jeremy Thompson. Additionally, I will provide grading support, hold office hours, and proctor exams for Cpts_487/587 Software Design and Architecture - Prof. Bolong Zeng during the same semester.

Skills: Java, Linux, C++, Software Development, Software Design Pattern, Communication

INTERNSHIP

Nanban Tech Ventures, Coimbatore, India — *Content Writer*, June 2020 – December 2020

Responsible for content related to Nanban marketplace blog and social media posts.

Skills: Client Approach, Research and Analysis, Communication

Zinnov Management Consulting Private Limited (Draup), Coimbatore, India — *Market Research Intern*, July 2020

Responsible for data collection, preprocessing and management.

Skills: Data Collection, Data Preparation

PROFESSIONAL TRAINING

Techzy IT Solutions, Coimbatore, India, May 2023 – July 2023

Specializing in the basics of Data Science and Machine Learning using Python by practical implementation in a live project.

Skills: Data Science – Life cycle, Machine Learning

TATA Elxsi, Bengaluru, India, April 2019

Application of Artificial Intelligence (Deep Neural Networks) for Autonomous Vehicles - Learned from the basics of Artificial Intelligence starting from Artificial Neural Networks to Deep Neural Networks and its application on vehicles.

Skills: Convolutional Neural Networks – Image classification, Deep Convolutional Networks

Uniq Technologies, Coimbatore, India, December 2018

Software basics about Photoshop – editing, Dreamweaver – static website creation, Android Studio, and Flash – features, were learnt with a theory class on Software development life cycle.

Skills: Photoshop, Android Studio, Web Technology, SDLC

EDUCATION

Washington State University, Pullman, Washington — *Master of Science in Computer Science*, August 2022 – May 2024, (Grade: 3.82/4)

Under the guidance of renowned Prof. Venkata Janardhan Rao Doppa engaged in rigorous educational research as part of a comprehensive thesis undertaking in Anomaly Detection Techniques with respect to healthcare applications – Thesis 2024

Skills: Data Science, Machine Learning, Computational Genomics, Artificial Intelligence, Advanced Algorithms, Graph Theory

Sri Krishna College of Technology, Coimbatore, India — *Bachelor of Engineering in Computer Science*, August 2017 – March 2021

(Grade: 9.44/10, Department Rank: 1, out of 167 students)

Cardiovascular disease prediction using particle swarm optimization – Thesis 2021

Skills: C, Python, R (advanced), C++, MySQL, HTML, CSS, Javascript – React, Go (Basics), Artificial Intelligence – Linear classification, optimization; Data science – Naïve Bayes, Particle Swarm Optimization, Microsoft Office

PUBLICATIONS

Senguttuvan, Nithyashree and Namasivayam, Vigneshwaran, Artificial Intelligence and its Application in Cardiovascular Disease Management — *Machine Learning and Systems Biology in Genomics and Health*. 2021. pp 189 – 236

CONFERENCE PROCEEDINGS AND PRESENTATIONS

Cardiovascular Disease Prediction by Particle Swarm Optimization — *Ninth International Conference on Contemporary Engineering and Technology (ICCET 2021)*, Chennai, India. 10th and 11th April 2021

Coronary Artery Disease Prediction by Unsupervised Learning and Particle Swarm Optimization — *First International Conference on Next Generation Computing Systems (ICNGCS 2021)*, Coimbatore, India. 27th March 2021

Preparation of Paperduino — *Elements 2K19*, Coimbatore, India. 25th September 2019

Survey paper on Generative Adversarial Neural Networks — *Sixth National Conference on “Recent trends in Computer Science”*, Chennai, India. 13th September 2019

Skills: Presentation, Research, Review, Public speaking

AWARDS

Rank 1 – Honor for Merit, Sri Krishna College of Technology, Coimbatore, India, 2022

National Programme on Technology Enhanced Learning (NPTEL) Discipline Star, Indian Institute of Technology (IITs), India, 2020

PROJECTS AND IDEA CHALLENGES

AgAID Agathon 2023, organized by Washington State University, Pullman, Washington, January 2023. Skills: Data Science, Agricultural Application

Project: Computer Vision for Localizing and Counting Apples. Skills: Computer Vision, Artificial Intelligence, Machine Learning

Smart India Hackathon 2020, an event organized by the Central Government of India, Delhi and won the “Internal Hackathon” conducted at Sri Krishna College of Technology, Coimbatore, India, February 2020.

Project – A deep learning model was developed and presented with the help of Keras, TensorFlow, Python, Nvidia which communicates through Slack and Twilio, with the analysis done by PowerBI to detect criminals through CCTV footage by recognizing their face, expression and gesture.

Skills: Artificial Intelligence, Computer Vision, Power BI, Leadership

MIT Hackathon 2020, Samhitha 2020 organized by Madras Institute of Technology, Chennai, India, January 2020.

Project – A data analytic model for Questionnaire Analysis was developed in Google Colab and presented. Skills: Data Science

Mobility Hackathon 2019, an event organized by Atal Incubation Center, Government of India and held at EMPI institutions, Delhi, India, **November 2019**.
Project-An updated application of Nissan Connect was developed in Android Studio and presented. **Skills: Android Development, Computer Vision**

Smart SKCT Hackathon 2019, held at Sri Krishna College of Technology, Coimbatore, India, **September 2019**.
Project-An application for our college food court and shops was developed in Android Studio and presented. **Skills: Presentation, Project Planning, Leadership**

CERTIFICATIONS AND COURSES - TECHNICAL

SWAYAM, NPTEL - National Programme on Technology Enhanced Learning, IIT(Kharagpur, Madras) - 7 certifications,

Skills:C, C++, Python, Java, DBMS, Computer Architecture and Organization, Data Analytics

Progate, India - Level 310, **Skills:** Go, JavaScript, Saas, JQuery, Command Line, Ruby, Python, Java, SQL and React (Basic)

Cisco -Networking Academy, India - 7 certifications, **Skills:**Python, Cybersecurity, IoT, Linux

Datacamp - 2 certifications, **Skills:**C, Java, Python, SQL

Mathworks - 2 certifications, **Skills:** Deep Learning, Machine Learning

Coursera - 2 certifications, **Skills:** AWS with Machine Learning

Wipro NASSCOM FutureSkills - 4 certifications, **Skills:**Communication, Cloud Computing, IoT, Artificial Intelligence

Qwiklabs - Data Science and Machine Learning Track

Percipio, Skillsoft - Technical Writer Journey, **Skills:** Technical content creation, Client approach and communication, Management

Google Analytics Academy - 3 certifications, **Skills:** Google Analytics

Google Developers - 2 Badges, **Skills:** Data, Machine Learning, Artificial Intelligence, Cloud Computing

VOLUNTEER EXPERIENCE

International Student Peer Mentor, IP, December 2022, **Skills:** Mentorship, People Engagement

MEMBERSHIPS

Professional Development Coordinator, Graduate Society of Women Engineers, August 2022, **Skills:** Leadership, Project Planning and Development

Member, International Association of Engineers - 283521, April 2021

Member, Google Developer Group, Coimbatore, April 2020, **Skills:** Mentor, Programming, Planning