

# YUVANSHANKAR AZHAGUMURUGAN

Darwin, NT 0810 | 0403040160 | [ayuvanshankar@gmail.com](mailto:ayuvanshankar@gmail.com) | [www.linkedin.com/in/yuvanshankar-azhagumurugan](https://www.linkedin.com/in/yuvanshankar-azhagumurugan) | <https://7uv4n.github.io/>

## PROFESSIONAL SUMMARY

Articulate programmer, skilled in Data and Analytics, with experience in Data Engineering and Cloud Technologies. Proficient in **Python, C++, Java, T-SQL, PL/SQL, Docker, and Microsoft Azure**, with strong background in Machine Learning and Internet of Things technologies. Demonstrated expertise in data presentation using **PowerBI**, developing applications using **Python, PowerApps** and building **IoT-based appliances**. Completed a Master of Information Technology (Software Engineering). Presently seeking opportunities in Data Analysis, but open for any IT technologies.

## TECHNICAL SKILLS

- **Data Analytics and Visualisation:** Power BI, Python, Excel, R
- **Data Engineering:** Python, Azure Data Studio, SSMS, SSIS, PL/SQL, PySpark
- **Artificial Intelligence:** LLMs, Generative AI, Machine Learning, Deep Learning systems
- **Python Frameworks & Libraries:** Flask, Django, OpenCV, Pandas, Scikit-learn, FastAPI, PySpark
- **Software Engineering:** MVC, GraphQL, ITIL
- **Testing & QA:** JMeter, Pytest, Selenium
- **User Interface Design:** Figma, Adobe XD, Canva, Bootstrap Studio, PowerApps
- **Cybersecurity:** Nmap, Metasploit, Kali Linux, BurpSuite, Nessus
- **Multimedia:** Video Editing, Photoshop, Logo Designing
- **Internet of Things:** Embedded C, MicroPython, Microcontrollers
- **Full-stack Development:** HTML, CSS, Flask, Django, FastAPI, C#, ASP.NET, Docker, Javascript
- **Programming Languages:** Python, C/C++, Java, C#
- **Version Control:** Git, GitHub
- **Administration Tools:** JIRA, Microsoft Project, MS Office (Word, Excel)
- **Integrated Development Environments (IDEs):** Eclipse, Visual Studio Code, Insiders, Anaconda Prompt, Jupyter Lab
- **Databases:** MySQL, Oracle SQL, PostgreSQL, Microsoft SQL
- **Web Scraping:** BeautifulSoup, Selenium
- **Cloud Platforms:** Microsoft Azure, Google Cloud Platform

## WORK HISTORY

### Data Science Student Intern Charles Darwin University

October 2024 – (Ongoing)  
Darwin, Australia

- Working as Data Science Intern at Planning and Performance Team
- Working on key areas of Data Science including Data Visualisation, Data Analysis, Business Analysis, Data Warehousing and ETL Development, Data Quality Management and Data Governance

### Consultant, Data and Analytics Aurecon

September 2023 – September 2024  
Darwin, Australia

- Working as Consultant (Part-time- due to my current Master's enrolment) at Data and Analytics division
- Predominantly working on Data Engineering Activities with tools like Python, Docker, Azure, Jupyter Notebooks
- Experience with technologies such as Containerization (Docker), Git, Data Science Language and Notebooks
- Experience in Data cleansing, Data Transformation, Data Loading
- Experience in Database Administration, with in Data Modelling using Microsoft SQL Server and relevant Database skills
- Familiarity in Data Presentation Techniques using Power BI

### Data Officer Northern Territory Government

June 2023 – July 2023  
Darwin, Australia

- Worked as Data officer with Office of Digital Government, within Department of Corporate and Digital Development, under Student Vacation Program
- Created information request form for capturing enquiries and intelligence gathered by the team
- Developed data template for standardising corporate telecommunications data
- Drafted first version of Telecommunication Data Governance Framework and undertook simple data quality activities

**Senior Analyst**  
**Ernst & Young LLP**

**July 2022 – Jan 2023**  
**Chennai, India**

- Worked in various technologies related to Data Science, Machine Learning, majorly with Python.
- Developed capstone Machine Learning web application projects using FastAPIs
- Worked on Docker technologies
- Worked on Microsoft Azure Platform cloud platform with official certifications
- Developed capstone projects with PySpark
- Experienced with Microsoft's Power BI

**Summer Intern**  
**Ernst & Young LLP**

**Feb 2022 – July 2022**  
**Chennai, India**

- Worked as a Summer Intern at Data Analysis in Technology consulting. Acquired certifications and training required for Senior Data Analyst role at EY

## **EDUCATION / CERTIFICATIONS**

- **Master of Information Technology (Software Engineering)** **Feb 2023 - November 2024**  
Charles Darwin University, Casuarina NT 0810, Northern Territory, Australia
- **Bachelor's degree: Computer Science and Engineering** **June 2018 - June 2022**  
B. S. Abdur Rahman Crescent Institute Of Science And Technology, Tamil Nadu 600048, India
- [Microsoft Certified: Power BI Data Analyst Associate](#)
- [Google Data Analytics Certificate](#)
- AZURE CERTIFICATIONS:
  - [Microsoft Certified: Azure Fundamentals](#)
  - [Microsoft Certified: Azure AI Fundamentals](#)
  - [Microsoft Certified: Azure Data Fundamentals](#)
  - [Microsoft Certified: Azure AI Engineer Associate](#)
  - [Microsoft Certified: Azure Database Administrator Associate](#)
- [Foundation C# with Microsoft](#) (Microsoft and Freecodecamp)
- Microsoft SQL Server 2022 Essential Training (LinkedIn)
- SQL Server Integration Services (LinkedIn)
- SQL for Data Analysis (LinkedIn)
- The Python Certification Course (Udemy)
- Advanced Python: Working with Data (LinkedIn)
- C++ Essential Training (LinkedIn)
- Cyber-security and the Internet of Things (Coursera)
- Learning ITIL (LinkedIn)
- Intro to Service Management with ITIL® 4 (LinkedIn)
- Video Editing with Adobe Premiere Pro (Udemy)
- PHP and MySQL (IIT Bombay)
- Java (IIT Bombay)
- Blockchain Basics (Coursera)
- Data Science Foundations: Fundamentals (LinkedIn)
- Generative AI: Working with Large Language Models (LinkedIn)

## **PATENTS**

1. **A System And Method For Remote Controlling A Plurality Of Appliances:** Created an smart home system to help people with disabilities like Paraplegia (**Application number:** 202241045334; **Date of filing:** 09/08/2022).
2. **Elevated Drip Irrigation System Using Processed Bamboo for Surveillance Platform:** New structure of drip irrigation system with surveillance platform using processed bamboo. (**Application number:** 202141012727; **Date of filing:** 24/03/2021).

3. **RFID-Based Elevated Grid Type Drip Irrigation System For Surveillance Robot Platform:** A grid-type surveillance platform is structured for crop analysis robots, where irrigation is implemented in drip format (**Application number:** 202141016513; **Date of filing:** 08/04/2021)

(Kindly visit this website to refer to the patents mentioned above: <https://ipindiaservices.gov.in/publicsearch>, as these patents are filed in India)

## PROJECTS

1. **ParaIoT: A smart-IoT system for Paraplegic individuals:** Proposed a new design for a smart home focused on people with paraplegia.
2. **IoT-based River Water Monitoring System (Ongoing):** Creating an IoT system that monitors river water on a lively basis for research purposes
3. **Student Appointment System using PowerApps:** Created a Customised Student Appointment System for Administrators in Charles Darwin Universities using Microsoft PowerApps.
4. **Customer Perception towards Gaming and Gaming Industry in Chennai:** This market research project aims to determine the consumers' perceptions and opinions towards games and their respective industries.
5. **Timetable Generator using Python:** Created a mini-Python project to allocate courses for various departments in an institution.
6. **Rent Price Predictor:** Created a webpage using FastAPI with Machine Learning Models to predict prices using an Airbnb dataset.
7. **Online Web application to store details of patients visiting a dental clinic using Python Flask and MySQL:** Designed a mini website for a Dental clinic to store details of patients visiting a Dental clinic using Python Flask and MySQL as a Database. Created as a Capstone Project.
8. **Addressing Pollution Challenges in Northern Territory:** Analysed waste discharge and pollution management documents in the Northern Territory to raise awareness on critical environmental issues. Utilised open-source based LLM systems.

## VOLUNTEERING EXPERIENCE

- One of the founding members of "Crescent Technocrats Club" and conducted a Project Hackathon on the topic "Emerging technologies that can change the world."
- Performed as Student Placement coordinator of B.S. Abdur Rahman Crescent Institute of Science and Technology
- Performed as Secretary of the Crescent Data science Club of B.S. Abdur Rahman Crescent Institute of Science and Technology
- One of the main coordinators of the National Level Symposium "Arcane", conducted by the Computer Science Department B. S. Abdur Rahman Crescent Institute of Science and Technology
- Performed as a Secretary of CDU IoT Club

**LANGUAGES:** English (Bilingual Proficiency), Tamil (Native Proficiency), French (Elementary Proficiency)

**LICENSES:** NT Driving License

## REFERENCES

**Bharanidharan Shanmugam**  
Senior Lecturer - Information Technology  
Charles Darwin University, Darwin, Australia  
[bharanidharan.shanmugam@cdu.edu.au](mailto:bharanidharan.shanmugam@cdu.edu.au)  
08 8946 7581

**Avnish Manraj**  
Associate, Data Consulting – Data and Analytics  
Aurecon, Sydney, Australia  
[Avnish.Manraj@aurecongroup.com](mailto:Avnish.Manraj@aurecongroup.com)  
+61 430 331198

**Mohammad Irfan P**  
Associate Consultant  
EY LLP, Chennai, India  
[mohamed\\_irfan.p@hotmail.com](mailto:mohamed_irfan.p@hotmail.com)  
+919094996553