Arushad Ahmed

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EDUCATION

MSc Artificial Intelligence (Distinction)
University of St. Andrews, UK
2022 – 2023
Dissertation Topic: "A better Automatic Speech Recognition (ASR) System for an Under-resourced Language"

BSc (Hons) Computer Science (First Class)
University of Nottingham, Malaysia
2013 - 2016
FYP Topic: "A Deep Learning approach for classifying Thaana alphabet symbols"

Edexcel A'level (3 A*s) & HSC Islam (A), Dhivehi (B)
Centre for Higher Secondary Education (CHSE), Maldives
2010 - 2012

Cambridge GCE (4 As), IGCSE (2 A*s) O'level & SSC Islam (A), Dhivehi (B)
Majeediyya School, Maldives
2007 - 2009

Primary Education
Kalaafaanu School, Maldives
2000 - 2006

EXPERIENCE

Co-Founder & Chief Technology Officer
Javaabu Pvt. Ltd., Maldives
2017 – NOW

- Responsible for implementing overall software development strategy and maintaining software quality
- Gathering requirements from an international clientele and formulating requirements specifications for ongoing projects
- Designing and developing system architectures for AI/Machine Learning applications, Web-based Information Systems, Mobile Applications and IoT Backends
- Leading and supervising day to day work of the in-house development team of 10
- Hiring new developers and designers
- Introducing latest development technologies
- Project management and coordination with clients

TECHNICAL SKILLS

Windows, CorelDraw, Photoshop, Lightroom, Eclipse, MS Access, Laravel, PhpStorm, AfterEffects, Premiere, Android Studio, HTML, CSS, WordPress, PHP, MySQL, Java, VBA, JavaScript, C/C++, Haskell, Python, AWS, VueJS, PyTorch

LEADERSHIP

Pangkor Hall Committee Member
2013/2014, Uni. of Nottingham (MY)
Helped organize events for the hall and attended to issues of fellow hall residents

Deputy School Captain
CHSE, 2011/2012
Took initiative in organizing school events

Shaheedh Ali House Captain
Majeediyya School, 2009
Led my house at school events

TEACHING

Conducted Web Dev Workshops
2013 - 2016
For Digital Arts Guild at University of Nottingham Malaysia Campus

Voluntary O'level Tutorial Sessions
2014
For students at Uligamu Madharusa, Maldives

Part-time Tutor *2011*
At Smart Education Center, Maldives

Founder, Sole Proprietor & Lead Developer
Javaabu SP, Maldives
2016 – NOW

- Providing web design, app development, and graphic design services for an international clientele
- Deploying projects on cloud hosting services and Linux server configuration

Freelance Developer
2013 – 2016

- Web design, mobile app development, graphic design, photography & videography services for an international clientele

Part-time Tutor
Smart Education Center, Male', Maldives
2011

- Taught Math, Physics and Chemistry to O'level students from grades 8, 9 and 10

PUBLICATIONS

Improving Dhivehi Automatic Speech Recognition (ASR) with Sub-word Modelling, Language Model Decoding and Automatic Spelling Correction
Proceedings of the 6th International Conference on Natural Language and Speech Processing (ICNLSP 2023), pages 256–265, Online. Association for Computational Linguistics · Dec 17, 2023

PROJECTS

2025 **ISLET Project Knowledge Management Repository –** *Ministry of Tourism and Environment, Maldives – funded by the Global Environment Facility (GEF)*
Designed and developed an online Knowledge Management Repository for the Integrated, Sustainable and Low Emission Transport (ISLET) in the Maldives Project. This is a comprehensive e-Platform designed to facilitate data-driven decision-making regarding low-emission transport initiatives in the Maldives.

The system allows multiple stakeholder organizations to dynamically define, submit, and manage data entries via user interface, bulk CSV import, or RESTful API integration for various data sources, such as Realtime EV Taxi Trip Data and Monthly Fuel Import Data. It features advanced Key Performance Indicator (KPI) management to perform aggregate calculations on collected data, automatically generating actionable insights. It supports multiple visualizations, including time series charts, categorical graphs, and interactive heat maps for geographical data. It provides a centralized module for storing and managing project-related documents along with metadata, categories, and tags and implements robust Role-Based Access Control (RBAC), user management, and organization association, ensuring granular permissions and data visibility.

The system is crucial for supporting the Measurement, Reporting, and Verification (MRV) systems needed to track emissions and assess the benefits and impacts of sustainable low-emission transport options in the Maldives.

2023 **DhivehiGPT –** *Javaabu Pvt. Ltd.*
dhivehigpt.com
Designed and developed the first online AI platform dedicated to Dhivehi language. Implemented Dhivehi AI chat with text generation capabilities. Trained and deployed Dhivehi Speech to Text models with Speaker Diarization. Deployed Dhivehi Text-to-Speech models. Implemented a comprehensive subscription system with Payment Gateway integration, usage tracking and support for team accounts. Implemented a zero-downtime deployment system for high availability even during system updates. Designed the system architecture to be highly scalable to serve a user base of over 40,000 registered customers as of December 2024.

2021 **Kiyeveni eLearning Portal –** *United Nations Development Programme (UNDP)*
kiyeveni.mv
Designed the system architecture and developed a custom eLearning portal for conducting online courses on Women Empowerment for Maldives Local Government Authority (LGA).

The portal can deliver video and textual course content, conduct quizzes, submit assignments and is accessible with sign language integration. It can also issue e-certificates on course completion and provides detailed analytics on student enrollment and engagement.

The project was primarily funded and run by the United Nations Development Programme (UNDP) with additional funds by the British High Commission Male' and Australian Aid.

2020 **Visit Maldives Website –** *Maldives Marketing & PR Corporation (MMPRC)*
visitmaldives.com
Designed the system architecture and developed a custom multilingual CMS using Laravel PHP framework for Maldive's official travel destination website. Also implemented a responsive UI according to the design specification using Bootstrap CSS framework.

2020 **The Circle Platform –** *Ugail Foundation, Maldives*
portal.thecircle.ac
Designed and developed an eLearning management platform catering to over 600 students. Implemented a dynamic video generation feature using multi-threading, Lottie Files, NodeJS and FFMPEG. Integration with AWS S3.

2019 **DFNest IoT Backend System –** *Digital Forest Sdn. Bhd., Malaysia*
app.dobiqueen.my
Designed the system architecture and developed a custom IoT backend for adding digital payments and transaction tracking to cash-based laundry token dispensing machines.

Implemented real-time IoT device data-logging, real-time device monitoring, uptime tracking and OTA firmware updates using MQTT, NodeJS, Redis, Web Sockets and MongoDB

Developed a customer loyalty management system with multiple payment gateway integrations, promo codes, reward system and Facebook and Google social logins.

2019 **Vessel Management System –** *Maldives Post Limited*

vms.mv
Designed the system architecture and developed a custom logistics management system using Laravel PHP Framework with real-time carrier tracking, online ticket and cargo bookings, mail tracking and accompanying mobile app.

Implementation of a REST API for consumption by the associated mobile app with OAuth2 authentication and Firebase Cloud Messaging integration for real-time push notifications.

2019 **Transport Authority Vessel Information System (TAVIS) –** *Transport Authority, Maldives - funded by the Asian Development Bank (ADB)*
Designed and developed a system for managing registrations and issuing safety certifications for all vessels in Maldives in accordance with local regulations and IMO standards. Implemented a role-based system with full online and over-the-counter application processing pipeline with entry, verification, authorization, payment, and issuance. Developed dynamic PDF generation for permits and registrations with Thaana script support. Conducted extensive requirements analysis sessions with stakeholders to identify business processes and discover ways to streamline existing workflows.

2018 **Job Center –** *Ministry of Economic Development, Maldives - funded by the World Bank*
jobcenter.mv
Designed and developed a custom job portal for the Maldivian government for connecting employers and jobseekers. Implemented a custom algorithm for smart job matching with jobseekers' interests and qualifications. Integrated SMS gateway for job listing notifications and developed a dynamic PDF CV generation feature.

2017 **eTukuri eCommerce Platform -** *Maldives Post Limited*
shop.etukuri.mv
Designed and developed a custom ecommerce platform for Maldives Post Limited with online payments integration, stock management and order management.

2016 **Land and Building Department (LBD) Information System –** *Ministry of Housing and Infrastructure, Maldives*
Designed and developed a system for managing all land titles of the capital Male' city.

2015 **Maldivian Red Crescent Website –** *Maldives Red Crescent (MRC)*
www.redcrescent.org.mv
Designed and developed a website, online volunteer registration system and donation system with payment gateway integration.

2015 **MyMentor Website -** *University of Nottingham, Malaysia*
www.mymentor.edu.my
Developed a website for MyMentor academic project initiated by Malaysian Ministry of Higher Education and a group of foreign universities operating in Malaysia.

2014 **ASA Website -** *Assoiciation for Social Awareness (ASA), Maldives*
www.asa.org.mv
Voluntarily developed a custom WordPress based website for the local NGO creating their first official web presence.

2010 **CHSE Website -** *Centre for Higher Secondary Education (CHSE), Maldives*
www.chse.edu.mv
Headed the web development team for the school's first website.

AWARDS

AUG 2026 **National Award of Recognition**
Awarded by the President of the Maldives for contributions to Communications and Information Technology in the area of Computer Software and Software Application development

NOV 2025 **President's Special Award for High Achievement**
Awarded by the President of the Maldives for achieving 1st Place in MSc Artificial Intelligence at the University of St. Andrews in 2023

NOV 2023 **School of Computer Science Award for MSc in Artificial Intelligence 2022/2023**
Awarded by the University of St. Andrews to the best overall student with the highest mean

NOV 2023 **Dean's List 2022/2023**
Awarded by the University of St. Andrews to students who average 16.5 or over in their degree

JUL 2022 **Commonwealth Masters Scholarship 2022/2023**
Awarded by the Commonwealth Scholarship Commission. Funded by the UK Foreign, Commonwealth & Development Office (FCDO)

OCT 2021 **National Youth Award 2021**
Awarded by the Ministry of Youth, Sports & Community Empowerment, Maldives in the area of Business and Economy

NOV 2019 **President's Special Award for High Achievement**
Awarded by the President of the Maldives for achieving the top marks in BSc (Hons) Computer Science at the University of Nottingham Malaysia Campus in 2016 and achieving the best Final Year Dissertation from the School of Computer Science

JUL 2016 **Best Project Award 2015/2016**
Awarded by University of Nottingham for the best Final Year Dissertation from the School of Computer Science

AUG 2015 **Dean's Excellence Scholarship Award 2014/2015**
Awarded by University of Nottingham for outstanding academic performance

AUG 2014 **Dean's Excellence Scholarship Award 2013/2014**
Awarded by University of Nottingham for outstanding academic performance

AUG 2013 **Maldives Airports Company (MACL) Ltd. Scholarship**

NOV 2012 **Edexcel Merit Award**
For gaining 3 A*s in A-level Subjects

SEP 2010 **Gold Star of Majeediyya School 2009**
For being the best all-round student

APR 2010 **Cambridge Outstanding Achievers Award**
For gaining the 3rd highest marks in the world and the highest in the Maldives at the Nov 2009 Cambridge O-Level exams for Computer Studies

APR 2010 **Cambridge Top in Maldives Award**
For gaining the highest marks in SSC Islamic Studies at the November 2009 exams

FEB 2007 **Top Scorer of Kalafaanu School 2006**

PASSIONS

Photography
view my photos at flickr.com/arushad

Videography
watch my videos at youtube.com/dash8x/videos

Travel
read about my adventures at
arushad.com/category/travel/