ASWIN SUBRAMANIAN MAHESWARAN

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Eligible to sign internship agreement via IE University

SUMMARY

Enthusiastic and hard-working computer science student with deep passion for machine learning, Generative AI and Robotics.

EDUCATION

IE UNIVERSITY (IEU)   **Madrid, Spain**
Bachelor's in Computer Science & Artificial Intelligence   **Expected: July 2026**
- GPA of 8.78/10.00 and awarded IE Junior Advisory Board Award (Merit Scholarship of 80%)

HINDUSTAN INTERNATIONAL SCHOOL   **Chennai, India**
British Diploma (A Levels)   **Graduated: June 2022**
- **A Levels**: Mathematics(A), Chemistry(A), Physics(B), Biology(B), and English Linguistics(C)

PERSONAL PROJECTS (October 2023 - Present)

- **Peppers and Emoji - Currently Developing an Emotion Recognition project based on Deep Learning (Link):** Aims to break communication barriers between individuals with and without Autism focusing on Computer Vision and using pepper (*a semi-humanoid robot at our university's robotics lab*) for interaction. (*Tech: OpenCV, Deep Face Algorithm, Face Recognition, Pandas).*
- **Borat - Built an Interpreted Borat-inspired** *(original movie)* **programming language (Link):** Developed a custom programming language, including lexer, parser, and AST components, using C and regular expressions. Demonstrated skills in compiler construction and language design, with practical application in data processing and pattern recognition. *(Tech: C, Tokenizer)*
- **Developed Asteroids, Arcade Game (Link)**: Implemented a Python-based version of the classic game using Hash Maps and Matrices for layout representation and recursive algorithms for efficient gameplay. Applied skills in game development and algorithmic problem-solving. *(Tech: Python, Pygame)*
- **Fiesta – Built the Backend for website focused on nightlife in Madrid (Link):** Connected to MySQL and MongoDB databases in Django Framework and scraped data using websites and API. *(Tech: Python, MySQL, MongoDB, Django, Web-Scraping).*
- **Water Distribution Plant Simulation Application (Link):** Connected to Azure IOT Hub for automated process and Streamlit services for messages on opening/closing of water valves based on the sensors. *(Tech: Python, and Azure Cloud Services)*

RELEVANT EXPERIENCE

IE ECON DATA LAB   **Madrid, Spain**
Project Lead   **January - June 2022**
• Developed prediction models to assess the economic and social impacts of forest certification on over 1000 Spanish companies, utilizing extensive data analysis with Python and R. (*Tech: Exploratory Data and Regression Analysis)*

JUNIOR TECH (CLEVER HARVEY)   **Chennai, India**
Member   **May – July 2021**
• Online Internship specialized in UX Design, contributing to project which developed a frontend website for Infinity Cars enhancing user experience and interface while leveraging existing data from Company with Clever Harvey. **(Link)** (*Tech: Flutter Flow, HTML)*

CONTRIBUTION AND EXTRACURRICULAR WORK

- **IE Sustainability Datathon**: Collaborated on 7-day water consumption prediction using advanced ML techniques for Acciona company in the city of Villarubia. **(Link)**; *Top 5 Finalists - **Finalist Certificate** (Tech: Data Analysis, Feature Engineering and ML Models - SkForecast, Random Forest and Decision Trees, Gradient Boosting using Scikit-learn)* (October 2023)
- **IE AI Hackathon:** Collaborated on building LLM's using Open AI API for Foqum Analytics; *Top Ten* (November 2023)
- **IE Venture Lab:** Selected participant qualified for semi-finals, developed an energy-harvesting sole (of shoe) prototype to charge devices via footsteps. Winners poised to secure investor backing. **(Link)** (September 2023)
- **IE Robotics Lab:** Selected as Developer to contribute to projects, research on Robotics and AI. (October 2023 – Present)
- **IE Coding Club:** Organize coding workshops and curated content for member newsletters. (September 2022 – Present)
- **IE Catalyst Impact Lecture Series Course (Link):** Insights in emerging technology trends from leading technology ventures.

TECHNICAL SKILLS AND PROFESSIONAL DEVELOPMENT

- **Languages and Frameworks:** C (basics), OpenCV, Python, R, Scikit-learn and Django.
- **Tools:** Azure, AWS, IBM SPSS, GIT, MySQL, Oracle VM and Ubuntu.
- **Deep Learning Specialization by Andrew Ng (3/5):** *Learning about CNN's and gaining advanced insights.* **(Link)**
- **Introduction to AI (IBM) (Link)** and **Introduction to Big Data (UC San Diego) (Link)**

ADDITIONAL INFORMATION

- **Languages:** English (Fluent), Tamil (Native), Gujrati (Native), Hindi (Fluent), Spanish (Intermediate).
- **Volunteer Work:** Served as an English Tutor with Chennai Mentors, teaching children spoken English for 2 months. (2021)
- **Interests:** Sports, writing and movies.