

# ONESH AINDAJEE PUNCHINILAME

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Profiles: [OneshP.me](#), [LinkedIn](#), [Github.com/OP-9](#)

## SKILLS

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**Frontend:** JavaScript, React, HTML5, CSS3

**Backend:** Python, Flask, Dash, SQL

**Technical Skills:** Full-Stack Development, Database Management, Git, Excel Automation, Data Collection & Cleaning, Engineering Design, Technical Documentation

**Tools:** Docker, GitHub, Visual Studio Code, PyCharm, Jupyter Notebook, SOLIDWORKS, AutoCAD

**Miscellaneous:** Critical Thinking, Problem-Solving, Communication, Teamwork, Organisation, Public Speaking

## PROFESSIONAL EXPERIENCE – (MORE DETAILS AVAILABLE IN [EXPERIENCE](#))

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### FR. LÜRSSEN WERFT

Bremen, Germany

*Thesis Student and Engineering Intern*

April 2022–February 2023

*Skills/Software:* German Language, Engineering Design, Technical Communication, Microsoft Excel.

- Proposed three methodologies (water heater, heat storage, electricity generator) to increase energy efficiency of fuel cell systems, complete with analysis and necessary thermodynamics and fluid dynamics calculations. **Increased energy efficiency from 30% to 75%.** Presented as bachelor thesis.
- Developed a statistical predictive tool** on Excel to determine cost of production of a new yacht. Used when presenting a customer with an initial estimate of the cost. Analysed data from all previously manufactured yachts and identified factors that influenced cost the most. **Reduced the number of meetings** between clients and engineers, and **accelerated purchase progression.**
- Designed and manufactured a prototype** to help secure the baseplates of exhaust pipe holders at specified angles during assembly using waste metal. **Increased speed of assembly** of exhaust pipes and **reduced wastage of material.**

## EDUCATION

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### UNIVERSITY OF ALBERTA

Canada

*M.Eng. in Electrical and Computer Engineering*

START: September 2026

*Specialisation: Software Engineering and Intelligent Systems*

### RHINE-WAAL UNIVERSITY OF APPLIED SCIENCES (HSRW)

Germany

*B.Sc. in Mechanical Engineering (Minor in Design Engineering)*

October 2018–May 2023

- Relevant Coursework: Numerical Mathematics (Grade: 100%), Programming (90%), Advanced Product Design (100%), Systems Theory & Controls (90%)
- Bachelor Thesis — Investigation of Fuel Cell Systems: Improving Efficiency Using Waste Heat.** Conducted an analysis of existing methanol driven fuel cell systems for super yachts to identify points of energy inefficiencies.

### FH AACHEN – UNIVERSITY OF APPLIED SCIENCES

Germany

*Foundation Year for German University Entry*

August 2017–June 2018

- Studied Physics, Mathematics, German, and English

## PROJECTS – (MORE DETAILS AVAILABLE IN [PROJECTS](#))

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### FINANCIAL PORTFOLIO APPLICATION ([GITHUB.COM/OP-9/STOCKS\\_APP](#))

January 2026

Developed a **full-stack web application**, deployed on **Docker**, for a friend to automate his financial portfolio's data storage, visualisation, and retrieval from Yahoo Finance (API) to his existing Excel workbook.

- Decreased the time he took to update his portfolio daily by 85%** and **increased the accuracy** of the portfolio.

- Built the frontend with **React** and integrated **Axios** for asynchronous API communication
- Engineered a **RESTful API using Flask**
- Implemented a real-time dashboard using React Hooks and Dash
- Designed a clean user experience which supports keyboard navigation
- Automated the addition and maintenance of financial data using Openpyxl.

#### **DATA ANALYSIS & PLOT GENERATOR TOOL** ([GITHUB.COM/OP-9/VOLCANO\\_PLOT\\_GENERATOR](https://github.com/OP-9/VOLCANO_PLOT_GENERATOR)) **December 2025**

Created this Python programme to generate volcano (scatter) plots of data from heart samples of patients that suffered different types of cardiomyopathies. Used by the **Faculty of Science graduate students of the Mahal Lab at the University of Alberta**.

- Improved the workflow in the Mahal Lab by **decreasing analysis time by 90% (from 3 hours to 18 minutes)**
- **Increased accuracy** of analysis by elimination of human error
- Allowed users to filter and select variables for comparison, creating new Excel sheets for each comparison and saved the plots as high-quality PNGs.

#### **SPOTIFY PERSONAL STATISTICS** ([GITHUB.COM/OP-9/SPOTIFY\\_PERSONAL\\_STATS\\_VISUALIZATION](https://github.com/OP-9/SPOTIFY_PERSONAL_STATS_VISUALIZATION)) **October 2025**

Coded a Python notebook to clean, organise, and visualise user-requested music streaming data retrieved from Spotify

- Cleaned and prepared a dataset with over **289,000 entries for EDA**
- Utilised Spotify's API to extract in-depth data for various songs
- **Presented visualisations** of the data highlighting all-time listening trends, artist specific trends, and monthly listening statistics.
- Built a web scraper to extract genre information (not provided through Spotify's API) for all the tracks in the dataset.

#### **PROFESSIONAL DEVELOPMENT – (MORE DETAILS AVAILABLE IN [CERTIFICATION](#))**

##### **CODECADEMY: Data and Programming Foundations for AI**

**Online — October 2025**

Learnt the fundamentals of machine learning engineering. Topics included principles of data literacy, sampling, and statistics.

##### **CODECADEMY: Computer Science — Professional Career Path**

**Online — January 2025**

Learnt the core fundamentals of computer science. Certificate could only be acquired after passing 7 examinations, with a minimum score of 70% and each focused on a particular topic of computer science:

- **Intro to Python:** Fundamentals of python and basic data structures and objects
- **Intro to Data Structures:** Linked Lists, Queues, Stacks, and HashMaps
- **Algorithms:** Basic Algorithms, Sorting Algorithms, Dynamic Programming
- **Trees and Graphs:** Trees and Tree Traversal, Graphs and Graphs Traversal
- **Databases:** Working with Databases, Designing Regional Databases, Advanced PostgreSQL
- **Computer Architecture:** Basics of Computers, Binary Numbering and Logic Gates
- **Maths for Computer Science:** Discrete Maths.

#### **LANGUAGES**

##### **NATIVE LANGUAGES**

English (C1)  
Sinhala

##### **PROFESSIONAL PROFICIENCY**

Hindi  
German (B2)

##### **FUNDAMENTAL PROFICIENCY**

French (A2)

#### **EXTRACURRICULARS**

- Student representative for the Technology and Bionics Faculty's Board of Studies (2021–2022)
- Board Member of HSRW IEEE and Head of Media Relations for the HSRW IEEE (2021–2022)
- Founding member of the HSRW Cricket Team (2019–2022)