


Kugaparan Suntharalingam

Undergraduate in Chemical & Process Engineering, University of Moratuwa

✉ skugaparan2@gmail.com | ✉ kugaparans.22@uom.lk |  linkedin.com/in/kugaparan

CAREER OBJECTIVE

Motivated and detail-oriented undergraduate in **Chemical & Process Engineering** at the University of Moratuwa, with strong foundations in thermodynamics, process systems, and data analysis. Seeking opportunities to apply technical knowledge, analytical skills, and problem-solving abilities in industrial process optimization and engineering projects.

EDUCATION

• University of Moratuwa <i>B.Eng. in Chemical & Process Engineering</i>	Sri Lanka <i>Mar 2023 – Apr 2027</i>
• J/Chavakachcheri Hindu College <i>G.C.E. Advanced Level (Physical Sciences) Z-score: 2.1550</i>	Sri Lanka <i>2021</i>
• J/Chavakachcheri Hindu College <i>G.C.E. Ordinary Level 8 A's, B in English Literature</i>	Sri Lanka <i>2018</i>

PROJECTS

- **Heat Exchanger Design Project** – Designed a shell-and-tube exchanger for vacuum residue cooling using water. Performed heat duty and thermal design calculations.
- **Packed Column Design Project** – Developed a packed column for benzene–toluene separation. Estimated column diameter, packing height, pressure drop, and flow distribution to ensure effective separation.
- **Process Equipment Design Mini-Project (Ongoing)** – Team project on designing a **molasses storage tank**, applying mechanical and process design principles.
- **Acetone Production Project (Assignments)** – Conducted a stepwise design study covering: (a) Feasibility and Techno-economics (market, raw materials, site/energy needs), (b) Process Description with EHS aspects & Block Flow Diagram, (c) Process Flow Diagram, (d) Material Balance, and (e) Energy Balance.
- **Regenerative Rankine Cycle – Power Plotter** – Developed a Python-based cycle simulator (GitHub link) for efficiency analysis. *Created a working website kugaparan.xyz to plot efficiency graphs and share notes.*

RELEVANT CERTIFICATIONS

- Power BI for Data Analysts – Microsoft Press (LinkedIn Learning)
- MATLAB Essential Training – LinkedIn Learning
- Supervised Machine Learning: Regression and Classification – Stanford Online (Coursera)
- Fundamentals of Visualization with Tableau – UC Davis (Coursera)
- Python for Beginners – University of Moratuwa Online Learning (Verification Code: nUFSvDSV5U)
- Programming with JavaScript – Meta (Coursera)
- SIX SIGMA WHITE BELT

TECHNICAL SKILLS

- **Engineering Tools:** MATLAB, Aspen Plus (beginner), Python (NumPy, Pandas, Matplotlib), Excel (Advanced)
- **Process Knowledge:** Thermodynamics, Heat & Mass Transfer, Fluid Mechanics, Separation Processes, Energy Systems
- **Data Science & Analytics:** R, Machine Learning (Regression, Classification, Neural Networks), Data Visualization (Power BI, Tableau, Python)
- **Other Tools:** SQL basics, Cloud Computing awareness (IBM, AWS), GitHub for version control

SOFT SKILLS

- Problem solving & analytical thinking
- Communication & teamwork
- Time management & adaptability
- Quick learner with growth mindset

Freelancer (Fiverr)

Video Editor

Remote
2022 – 2023

- Designed and edited short ads and YouTube content using **Canva**.
- Created visually appealing templates and graphics tailored to client needs.
- Managed client requirements and delivered projects on time.
- **Portfolio:** Fiverr Profile

LEADERSHIP & MEMBERSHIPS

- Prefect – J/Chavakachcheri Hindu College
- Member – Tamil Literary Association
- Member – Chess Club

VOLUNTEERING

- **J/Chavakachcheri Hindu College** Sri Lanka
Volunteer Tutor – Combined Mathematics and Chemistry Oct 2023 – Nov 2023
 - Conducted tutoring sessions for Advanced Level students in **Combined Mathematics and Chemistry**.
- **Tamil Literary Association, University of Moratuwa** Sri Lanka
Member 2023 – Present
 - Organized and conducted model exams for Physical and Biological Science students.

LANGUAGES

- English – Full Professional Proficiency
- Sinhala – Basic Understanding
- Tamil – Native

REFERENCES

- **Dr. Mahinsasa Rathnayake**
Senior Lecturer, Department of Chemical and Process Engineering, University of Moratuwa
Contact: Office: +94 112 640 051 Ext: 4607 Mobile: +94 702 532 785
Email: mrathnayake@uom.lk
- **Dr. S.A.D.T. Subasinghe**
Senior Lecturer, Department of Chemical and Process Engineering, University of Moratuwa
Contact: Mobile: +94 777 864 835
Email: thusharas@uom.lk