


Python & Automation Intern — Assignment

Objective:

Evaluate your automation skills using real event data. You'll write Python scripts to clean data, send personalized messages, and simulate engagement workflows.

Estimated Time: 3 hours

Dataset Provided:

Data file with >600 rows including the following columns:  Data

- `name, first_name, last_name, email, created_at`
- `approval_status, has_joined_event`
`amount, amount_tax, amount_discount, currency, ticket_name`
- `Job Title, LinkedIn profile`

Step 1: Data Cleaning Script (30–45 min)

Write a Python script to:

- Remove duplicate emails
- Normalize `has_joined_event` values (`Yes/No` → `True/False`)
- Identify and flag rows where:
 - LinkedIn profile is missing or incomplete
 - The job title is blank
- Save the cleaned version as a new CSV

Deliverable: `clean_data.py` + `cleaned_output.csv`

Step 2: Auto-Personalized Messaging Script (1–1.5 hours)

Create a Python script to generate customized email or LinkedIn-style messages based on:

- Whether they joined the event
- Their job title
- Their name
- Presence/absence of a LinkedIn profile

Examples:

- 🎉 *Joined the event:*
“Hey Venkatesh, thanks for joining our session! As a freelance developer, we think you’ll love our upcoming AI workflow tools. Want early access?”
- 🙄 *Didn’t join:*
“Hi Arushi, sorry we missed you at the last event! We’re preparing another session that might better suit your interests as a Product Manager.”

Script output should be a `.csv` file with columns:

- `email, message`

Bonus: Store the messages in a `.txt` or `.json` format per user if you’d like!

Step 3: Optional Automation (Bonus, 30–45 min)

- Add a function to **auto-send emails** using SMTP (Gmail API or any dummy SMTP setup).
- Or create a **batch-ready script** that pushes the messages into a Telegram bot queue.

Submission Guidelines:

- Reply to the same email with your Google Doc/PDF/GitHub repo link.
- Include your LinkedIn profile in the email.