

## Livia Ellen

Portfolio : <https://liviaellen.com/portfolio>

Github : <https://github.com/liviaellen>

Resume : <https://liviaellen.com/cv>



### Highlights:

- 6+ years in AI & DS (oil & gas consulting service, edtech, fintech) - ML, CV, AR, wearables
- SLB - Data Scientist** , built ML models to optimize oil production across 400+ wells = **19% ROI increase for 5 years** - paper published in **SPE Oil & Gas** <http://doi.org/10.2118/210614-MS>
- Le Wagon for Business - Data Science Lead**, Build Data solutions + tech training for clients + 1k students trained, maintain Github 20k users
- CarlQ - Machine Learning Engineer** - build forecasting for fleet fueling prediction on fleet activity on 271 clients & 47000 fleets
- 20+ Applied AI/ML solutions** delivered for clients. Things i built <https://liviaellen.com/portfolio>
- Master in Data Science @ **University of San Francisco**, Undergrad Computer Engineering @ **Universitas Indonesia**
- Founded AR Software Agency during undergrad**, filterqu (AR Experience for Marketing, 10B impressions, 10M UGC Videos Generated), serving 100+ clients ( <https://liviaellen.com/ar-profile> ) sunsetted after platform support ended.
- Online Contribution:** Writer for [Towards Data Science](#) (660K Followers), [Python in Plain English](#) Newsletter (66k followers, 2M Reads ), invited by Meta to launch a Meta Spark AR Course in FB Blueprint (Meta version of Uдеми) :)

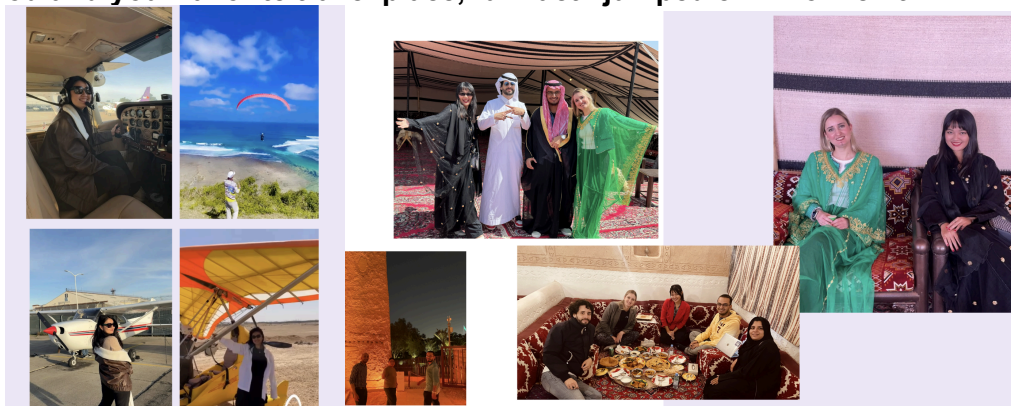
### Life story

- Grew up in **Indonesia**, previously Bali, now based in San Francisco (moved here June 2024), past 3 years I work & live in 10 countries (Asia & Middle East→ US, Indonesia, Thailand, Vietnam, Turkey, Saudi Arabia, Japan, UAE, Singapore)
- Bachelor in Computer Engineering, University of Indonesia (Top 1 Uni in Indonesia). **Data Science Master @ University of San Francisco** (Women in Tech Scholar)
- Worked since age 14, worked as a commercial model & TV host + TV crew for 8 years ([100+ TV ads](#), primetime show TV host - [Bedah Rumah](#) with 1M+ viewers), while I can influence in many ways in TV, I left because deep down tech / building product has more ways to leave more meaningful impact. LOL i am just a nerd, then work for 6 Years in ML + DS
- I have reached **1M in TV, 10M people** using AR product I built, next stepping stone is **100M people** impacted
- What I am up to now: Research @ USF, writing papers + ML Consulting.
- Talk to me about **food and your favorite travel place, fun fact i jumped 82 x from cliff**

interest:  
dancing, paragliding,  
culture+nature (travel)

Happy to share stories  
over coffee!

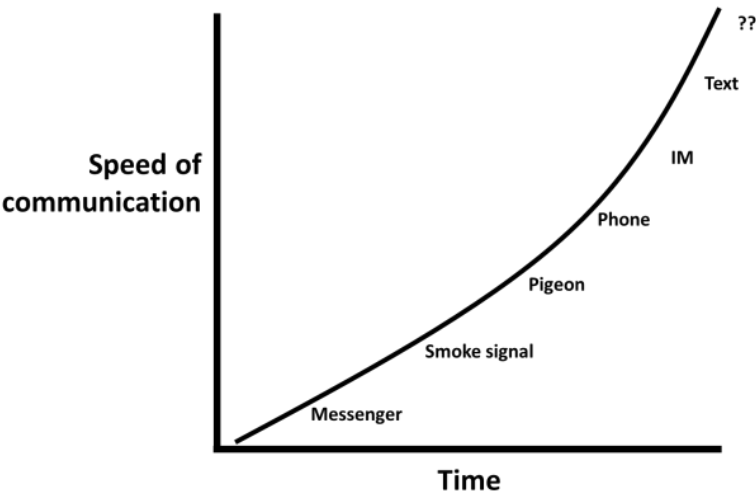
I am single btw  
Thanks for reading :)



Interest

How technology would shape the world:

- 1. Human AI Synergy - unlocking brain power
- 2. Robot & Humanoid - unlocking physical power
- 3. Next Gen interface - unlocking new ways of communication (think Mouse, Touch screen, voice interface wearable, ar glasses, what's next)



“If humans could communicate more efficiently, we would be in a different world by now. - Nik, Omi Founder”

If I'm contributing in one of these sectors, that is success to me.

Online Publication (Writing Stats)

Published	Story	Views	Reads
Jan 2024	<b>I Tried Data Analysis ChatGPT Plugin: Every Analyst's ...</b> 10 min read · Jan 5, 2024 · <a href="#">View story</a>	33K	18.7K
Dec 2023	<b>How Would I Learn to Code with ChatGPT if I Had to St...</b> 9 min read · Dec 31, 2023 · <a href="#">View story</a>	18.6K	8.8K
Aug 2023	<b>Create Your Own PDF Question Answering System wit...</b> 5 min read · Aug 19, 2023 · <a href="#">View story</a>	6K	3K
	<b>Turning Sales Meeting Videos into Insight: AI Emotion Detection with Deep Learning</b> ★ · 8 min read · Jun 12, 2025 · <a href="#">View story</a>	18.1K	1.3K

**Past Experience that teach me a lot :**

### **Founder Filterqu ( AR Software Studio for Marketing)**

Application : In Person AR Mirror, AR Glasses Application

AR in Social Media for Marketing Campaign

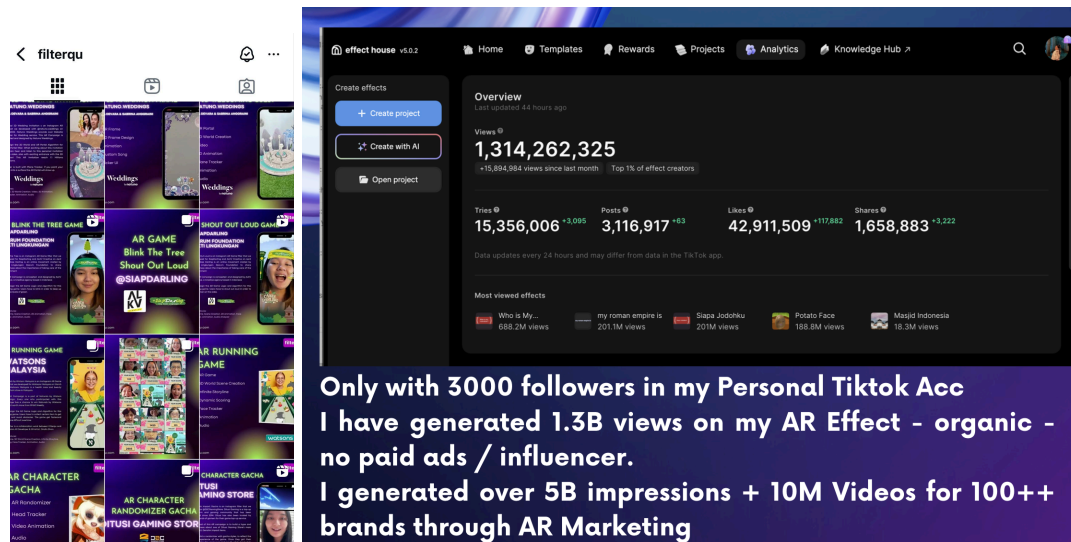
10B impressions, 10M UGC Videos Generated, 100+ clients

Started this during undergrad for hobby

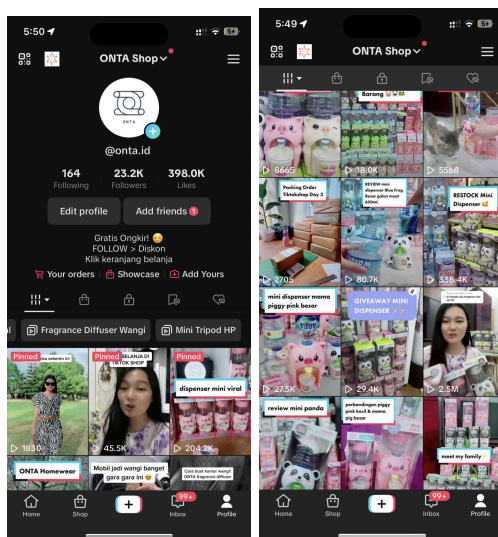
Featured in Meta Marketing Summit, ad week, etc

**What's the cons:** not scalable, its my time, i was dependent on the AR Ecosystem platform(one get shutdown)

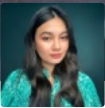
I am still active in **AR Community** as hobbyist: recent exhibition in AWE 2025 (largest AR Expo), Youtube AR beta testing in june 2025 + receiving Spectacles AR glasses early on Snap Product Launch in 2024.



- **Toy Ecommerce 2022 back home:**  
**Scale E-commerce to 20k followers in 2 weeks, highest peak was 20K MRR**



**Why stop:** covid, importing products from China was difficult, I moved cities for new job, Tech is more scalable (focus on filterqu at that time) - the business was then continued by my little sister



# Livia Ellen Portfolio

## About Ellen

AI & AR Consultant

Data Scientist with 6 Years of Experience

Are you looking for a consultant with experience in machine learning, statistical analysis, augmented reality, and data visualization? Look no further! With 6 years of experience in the field, I am confident in my ability to help your team make data-driven decisions and uncover valuable insights.

Ready to work together?

Contact Me

Resume

Book a Call

liviaellen.com

Github

LinkedIn

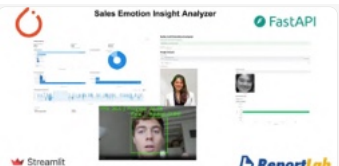


## Projects

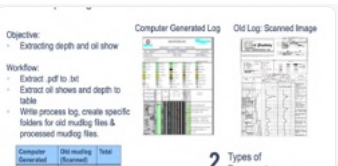
Please select a project category from the list below to view more details.  
To learn about a certain project, simply click the card to open.

Portfolio

All Machine Learning Automation Data Viz Data Analytics API Development Table



**Sales Call Emotion Insight AI Analyzer**  
A deep learning-based application for analyzing emotions and engage  
Data Science Data Visualization Machine Learning



**Text Extraction on Drilling Data**  
Develop an automated text extraction & graph extraction tool to process  
Data Science Computer Vision Automation API Machine Learning



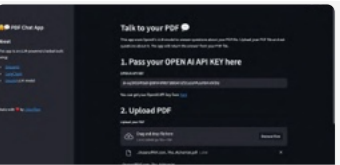
**Well Production Optimization**  
Well Production Optimization for Oil Company  
Data Science Machine Learning



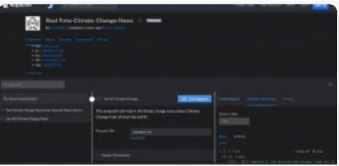
**PowerBI Energy Consumption Dashboard**  
Tableau, PowerBI, Looker, or Spotfire Dashboard for website analytics  
Data Analytics Data Visualization



**Vehicle Damage Detection**  
Develop an automated vehicle damage detection system that can identify  
Data Science Computer Vision Automation API Machine Learning



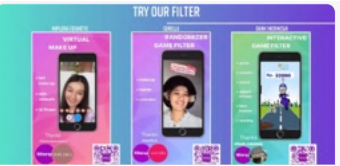
**Ask My PDF - GPT Based App**  
This app uses OpenAI's LLM model to answer questions about your PDF  
Data Science GPT NLP API Machine Learning



**Climate Change News API**  
A Freemium API Service pulling all real time Climate Change News across  
API Web Scraping



**Looker Website Analytics Dashboard**  
Tableau, PowerBI, Looker, or Spotfire Dashboard for website analytics  
Data Analytics Data Visualization



**Augmented Reality Experience for Brands**  
Tableau, PowerBI, Looker, or Spotfire Dashboard for e-commerce.  
Augmented Reality Game Development Marketing Machine Learning



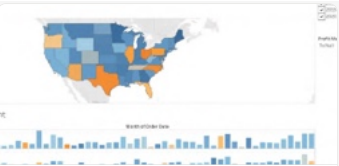
**Ellen AI Assistant**  
AI based GPT assistant to answer any questions, served as an API and  
Data Science GPT NLP API Machine Learning



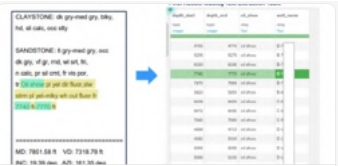
**Stock Data Pipeline for JS Holding**  
Build a Data Pipeline and automating data flow for wealth management  
Data Science API Data Analytics Automation



**Selenium Automation, Zapier Integration**  
Setup an automation pipeline and zapier integration  
API Data Analytics Automation



**E-commerce PowerBI Sales Dashboard**  
Tableau, PowerBI, Looker, or Spotfire Dashboard for e-commerce.  
Data Analytics Data Visualization



**PDF Text Extraction for Drilling Data**  
Automated Workflow for Processing PDF Files into Structured Data  
NLP Data Science Data Visualization



**Student Engagement Detector on E-learning**  
An engagement detector detecting student eye gaze and facial expression  
Data Science Machine Learning Computer Vision

## Client Testimonials

"We had a job that required a wide breadth of technical knowledge and Livia was able to provide her expertise and help us complete this job. She is extremely technical and knowledgeable and we will be working again on future projects.  
Very strong candidate!"  
- Javier

"Livia Ellen is truly brilliant and really efficient. She really knows how to attack problem sets and make them easily understandable to non-technical people like myself."  
- Joy

"Livia was great to work with. Responsive, skilled, efficient, delivers high quality work. Highly recommended."  
- Robert B.



SERIOUS WORK ML - AI Stuff (More on <https://liviaellen.com/portfolio> )

## 1. Damage Detection & Object Recognition Models (Try Motoring)

- **Truck Damage Detection:** Developed computer vision models for truck damage detection and object recognition for Try Motoring for Truck Facilities in Indiana.
  - **Tech Stack:** PyTorch, Coco Detectron, Amazon Textract, Tensorflow Lite  
<https://liviaellen.notion.site/Livia-Ellen-Work-Portfolio-5563c9c780aa41caaff219e910ebf012?p=c68d129280384c2fa7eefccafeb795e&pm=c>



- **Engagement Detection from Video Streaming:**
  - **Publications:** *Student Engagement Detection using Computer Vision* – published in UI Journal Library  
(<https://lib.ui.ac.id/detail?id=20507733&lokasi=lokal> )
  - **Code:** <https://github.com/liviaellen/engagementdetector> , [Read More](#)
  - **Tech Stack:** TensorFlow, CNN, OpenCV

**Use Case:** Applies to **robot perception**, robustness in real-world environments, and vision foundation models.

## 2. Well Portfolio Optimization Model (SLB, Pertamina)

- **Description:** Published applied AI research optimizing drilling portfolios, automating classification and recommendation, resulting 17% ROI Increase in 400 wells for 5 years
- **Publication:** *Well Portfolio Optimization* – published in **SPE Journal** (<https://doi.org/10.2118/210614-MS> , [Read More](#))
- **Tech Stack:** Python, Scikit-learn, Tree based model, optimization methods, OCR

**Use Case:** Shows **decision-making under uncertainty**, applied **optimization frameworks**, and **research-to-publication pipeline**.

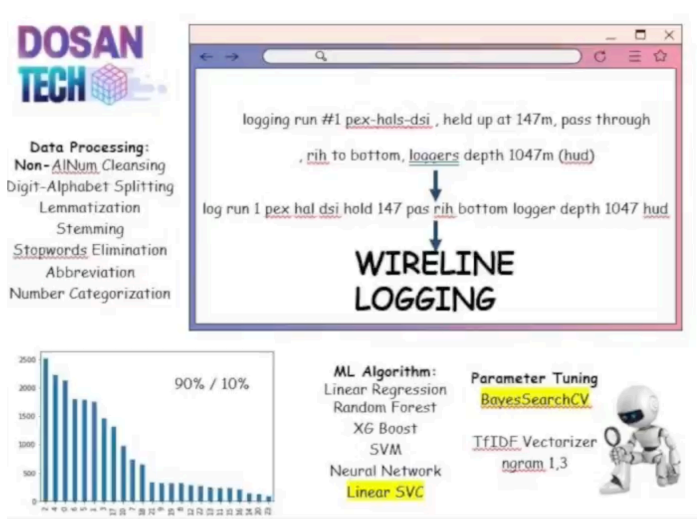
## 3. Fleet Telematics Forecasting (CarlQ Pay)

- **Description:** Built predictive ML models for 47K+ connected vehicles, forecasting fueling transactions using telemetry (GPS, odometer, fuel levels). Optimized for **low-latency inference** in production.
- **Tech Stack:** XGBoost, Pandas, Docker.

**Use Case:** Maps to trajectory forecasting, and **systems deployment at scale**.

#### 4. LLM + NLP DDR Model for Document Categorization (SLB)

- **Description:** Designed and fine-tuned a domain-specific LLM pipeline for document detection, retrieval, and classification. Leveraged embeddings and semantic search to automate categorization at scale.
- Won Most Innovative Solution from SLB AI Lab Montpellier France.
- Video: <http://liviaellen.com/nlp-ddr>
- **Tech Stack:** HuggingFace Transformers, FAISS, Python.
- **Relevance to FAR:** Shows **NLP + structured data integration** and **scalable LLM systems**.



#### 5. Text Extraction on Drilling Data

- **Description:** Develop an automated text extraction & graph extraction tool to process scanned documents and PDFs, extraction oil production data in drilled well
- **Tech Stack:** PyPDF, OCR, Dataiku

<https://liviaellen.notion.site/Livia-Ellen-Work-Portfolio-5563c9c780aa41caaff219e910ebf012?p=43d10fd319b8475a8a02d241d2c73fab&pm=c>

## Overview | Mudlog Files Text Extraction

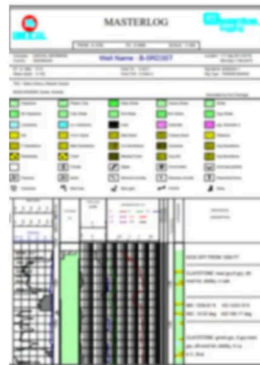
### Objective:

- Extracting depth and oil show

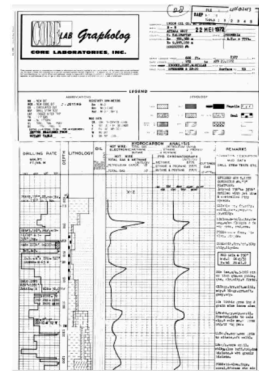
### Workflow:

- Extract .pdf to .txt
- Extract oil shows and depth to table
- Write process log, create specific folders for old mudlog files & processed mudlog files.

Computer Generated Log



Old Log: Scanned Image



Computer Generated	Old mudlog (Scanned)	Total
183	276	459

2 Types of Document

## Progress

CLAYSTONE: dk gry-med gry, blkly, hd, sli calc, occ slty
SANDSTONE: lt gry-med gry, occ dk gry, vf gr, rnd, wl srt, fri, n calc, pr sil cmt, fr vis por, tr Oil show pl yel dir fluor,slw strm pl yel-miky wh cut fluor fr
7740 ft-7770 ft
=====
MD: 7851.58 ft VD: 7318.78 ft
INC: 19.39 deg AZI: 161.35 deg



Final Result: Mudlog Text Extraction Table

depth_start	depth_end	oil_show	well_name
bigint	bigint	string	string
Integer	Integer	Text	Text
4755	4770	oil show	B-7
5235	5270	oil show	B-7
6150	6180	oil show	B-7
7740	7770	oil show	B-7
7870	7890	oil show	B-7
5820	5850	oil show	B-8
6438	6450	oil show	C-5
6472	6485	oil show	C-5
7840	7860	oil show	C-5
4698	4710	oil show	D-1
4982	5000	oil show	D-1
5065	5085	oil show	D-1
5095	5105	oil show	D-1
5115	5125	oil show	D-1

## 6. Michelin Star Restaurant Explorer

- Description:** Built a global analytics dashboard for Michelin-starred restaurants. Designed a fully automated ETL pipeline to scrape, fetch, clean, and enrich data with Google Places API. Data is stored in MongoDB Atlas and BigQuery, then visualized in Looker Studio. The project supports daily updates, multilingual handling, and trend analysis across cuisines and geographies.

- **Tech Stack:** Vision models, PyTorch, LangChain, FastAPI.
- **Use Case:** Demonstrates end-to-end data engineering, scalable cloud deployment, and real-time automated data integration + analytic dashboard
- Try it here: <https://liviaellen.com/michelin>
- Devpost + Video: <https://devpost.com/hackathons?page=2&search=snap>

## MichelinMind

### AI-Powered Michelin Restaurant Discovery

