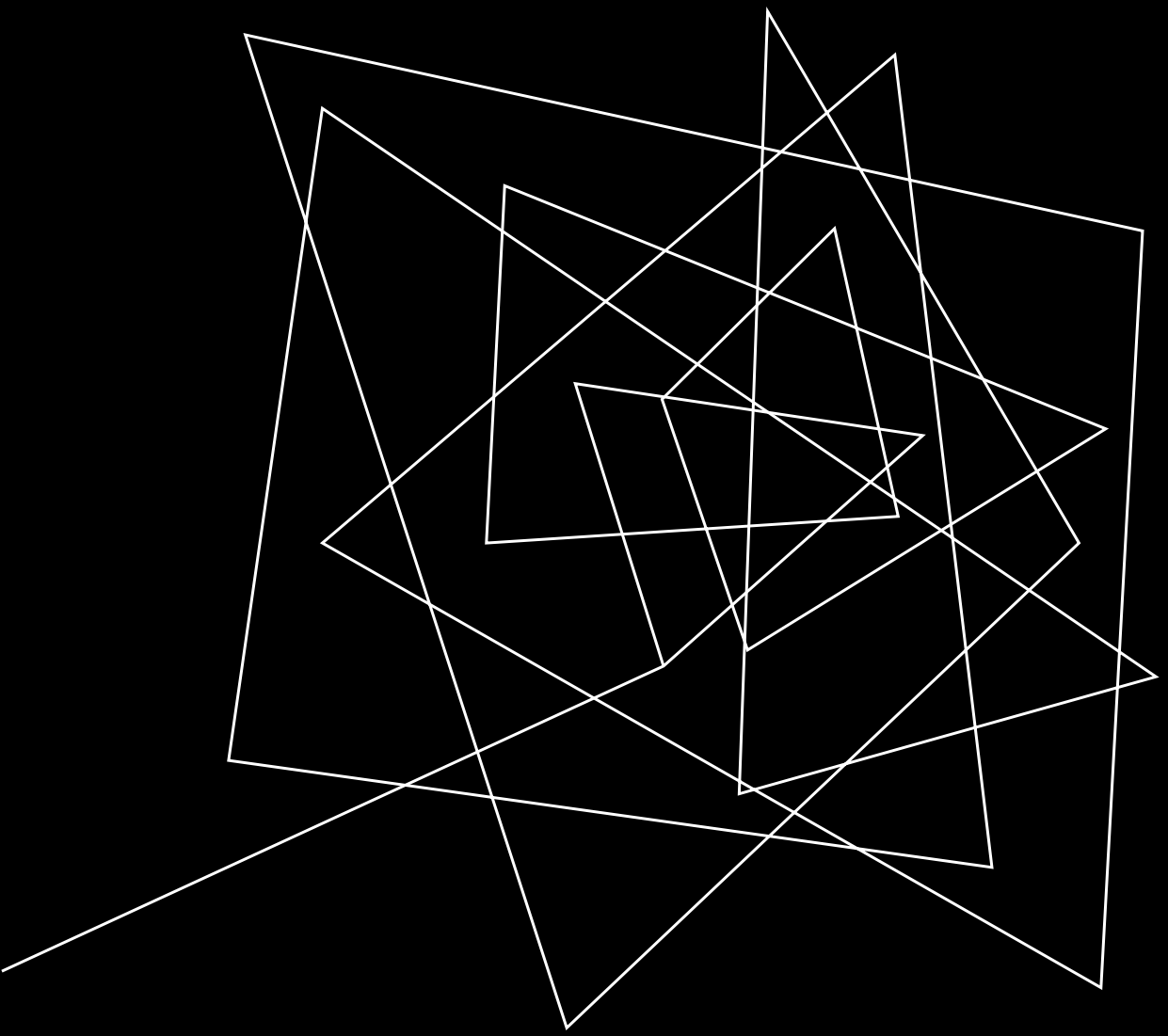
ETA OFFICE OF JOB CORPS (OJC) CODING IT FORWARD PRESENTATION

Sanjana Gunda

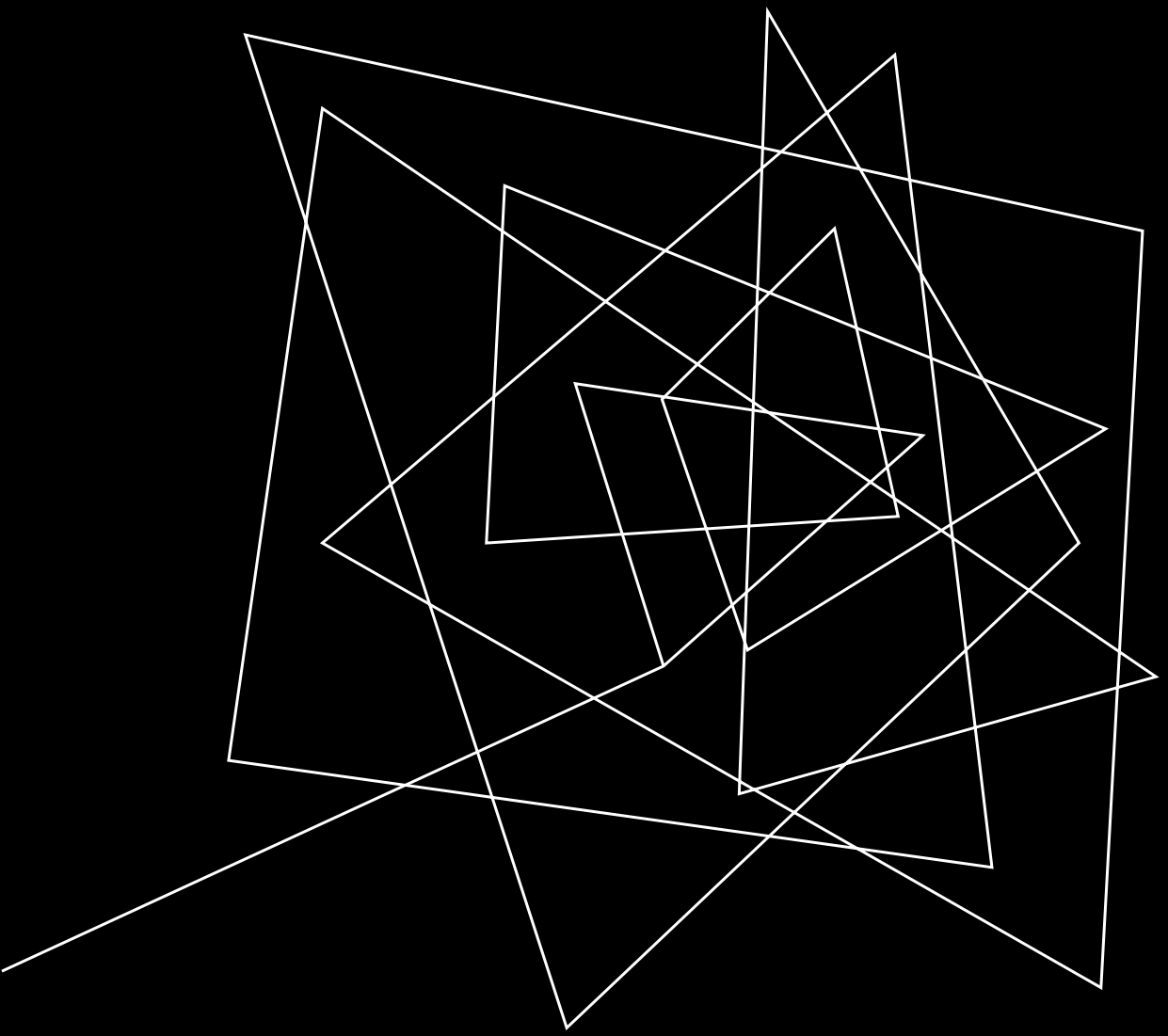


THE TASK:

Create an internal dashboard that integrates BLS Occupational Employment and Wage Statistics (OEWS) data with OJC center and placement data

THE PURPOSE:

- Ability to look at industry and occupation wage estimate information near OJC centers
- Compare OJC graduate starting hourly wages to industry/occupation wide estimates in that area



STEP ONE

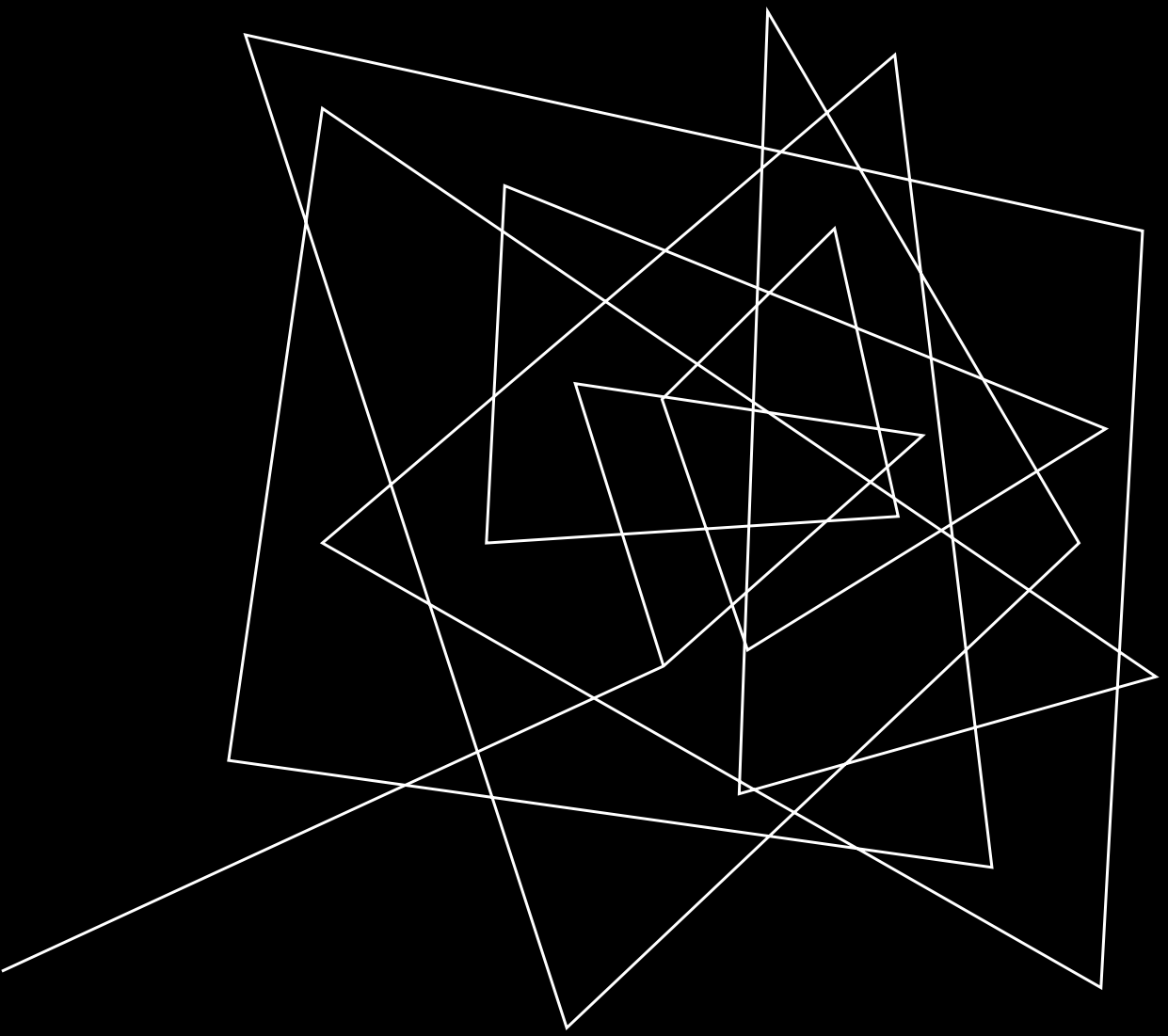
Getting to know the data

GETTING TO KNOW THE DATA

- Contacted and communicated with BLS for information and documentation regarding the OEWS data set to analyze its scope and limitations
- Set up meetings with OJC subject matter experts for information about the placement data
- Exploring the data in R

CHOOSING A BLS OEWS DATA SET

- Look at factors like geographic level included, occupation/industry based, additional information included (location quotient), depth of wage statistics data
- Occupation Metropolitan and nonmetropolitan area dataset
  - Hourly 10^{th}, 25^{th},75^{th},90^{th} percentiles, mean, median, Location quotient



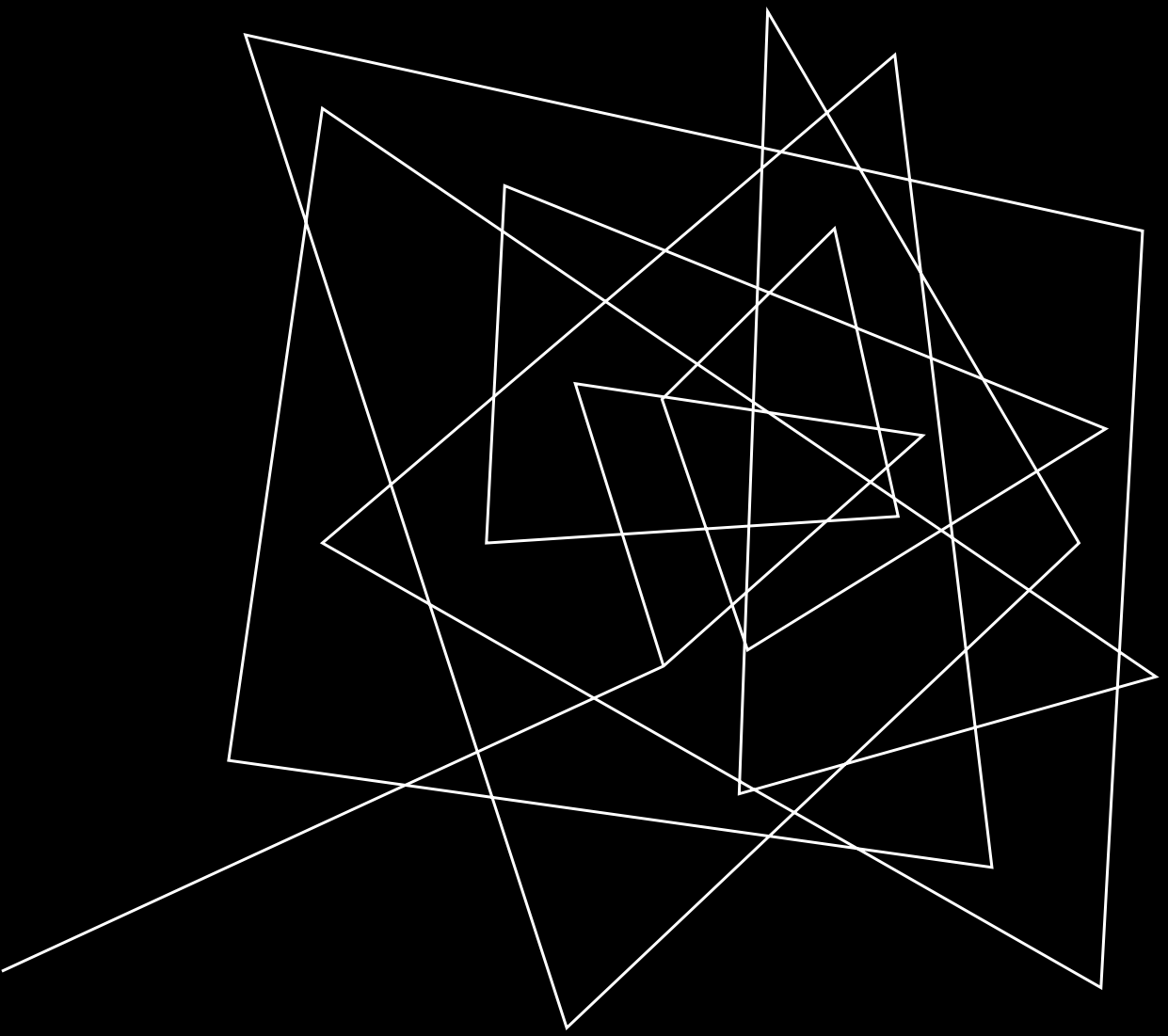
STEP TWO

Creating a minimum viable product and getting feedback

CREATING A MINIMUM VIABLE PRODUCT

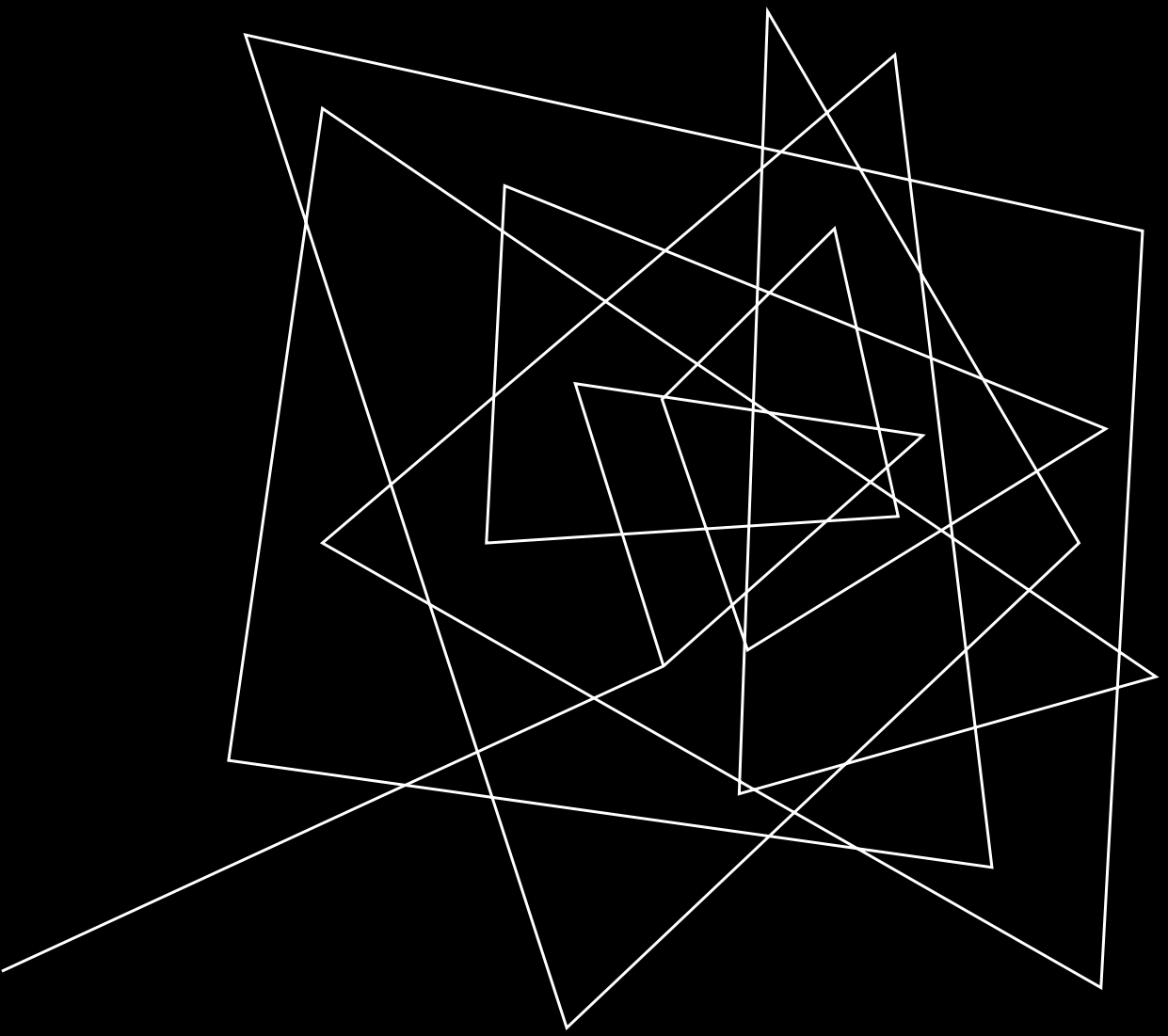
- Process:
  - Use R to bring in and clean up data sets
  - Join data sets and build visualizations model in Tableau
  - Data validation and quality assurance
  - If notice inconsistencies in the data, go a step beyond to explore the data set for why this may be
  - Get feedback

- Our thought process:
  - Create code that is reusable and easily modifiable for future datasets
  - Create multiple options in Tableau to make it more user friendly and adaptable



STEP THREE

Repeating the process



OBSTACLE

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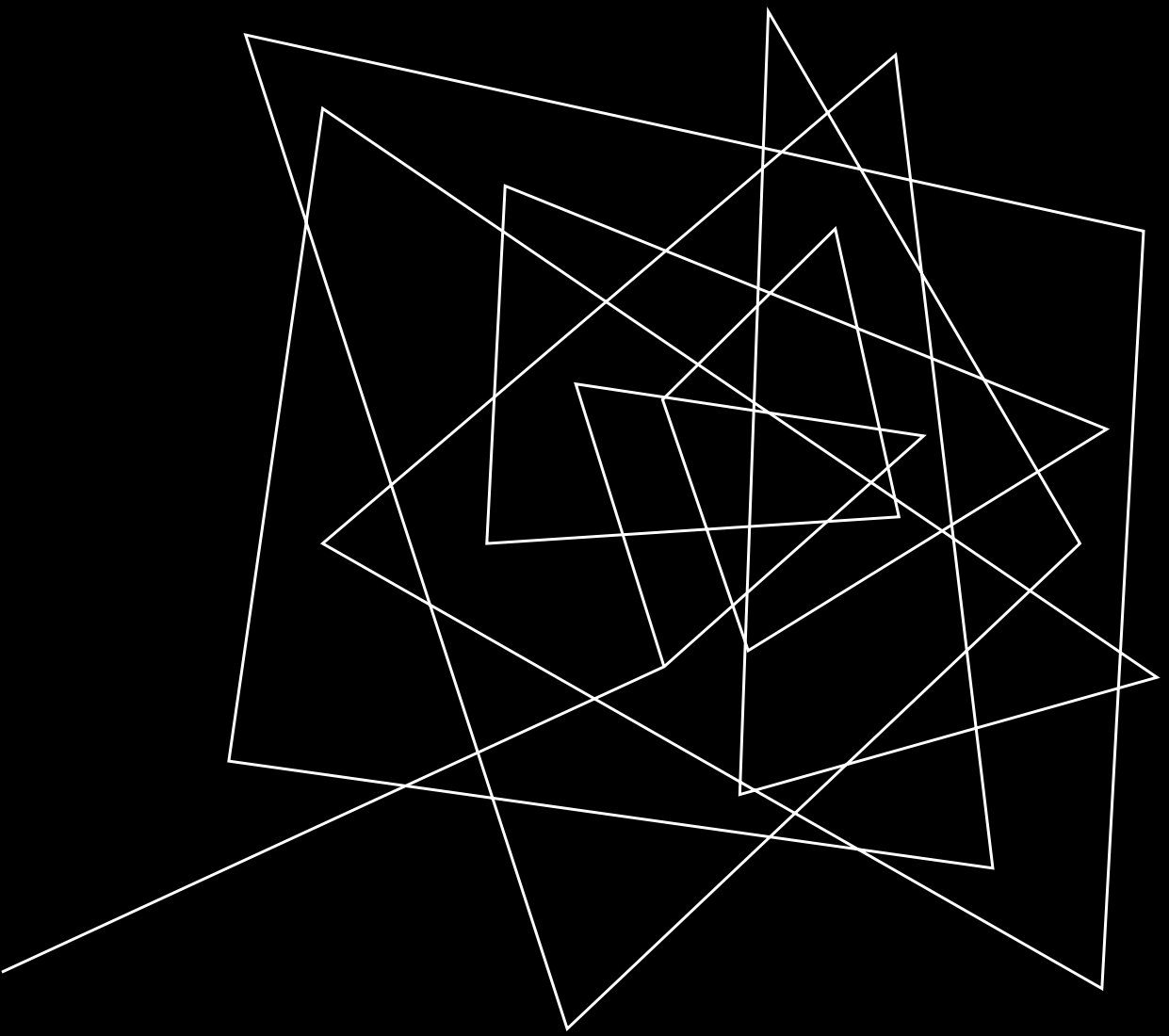
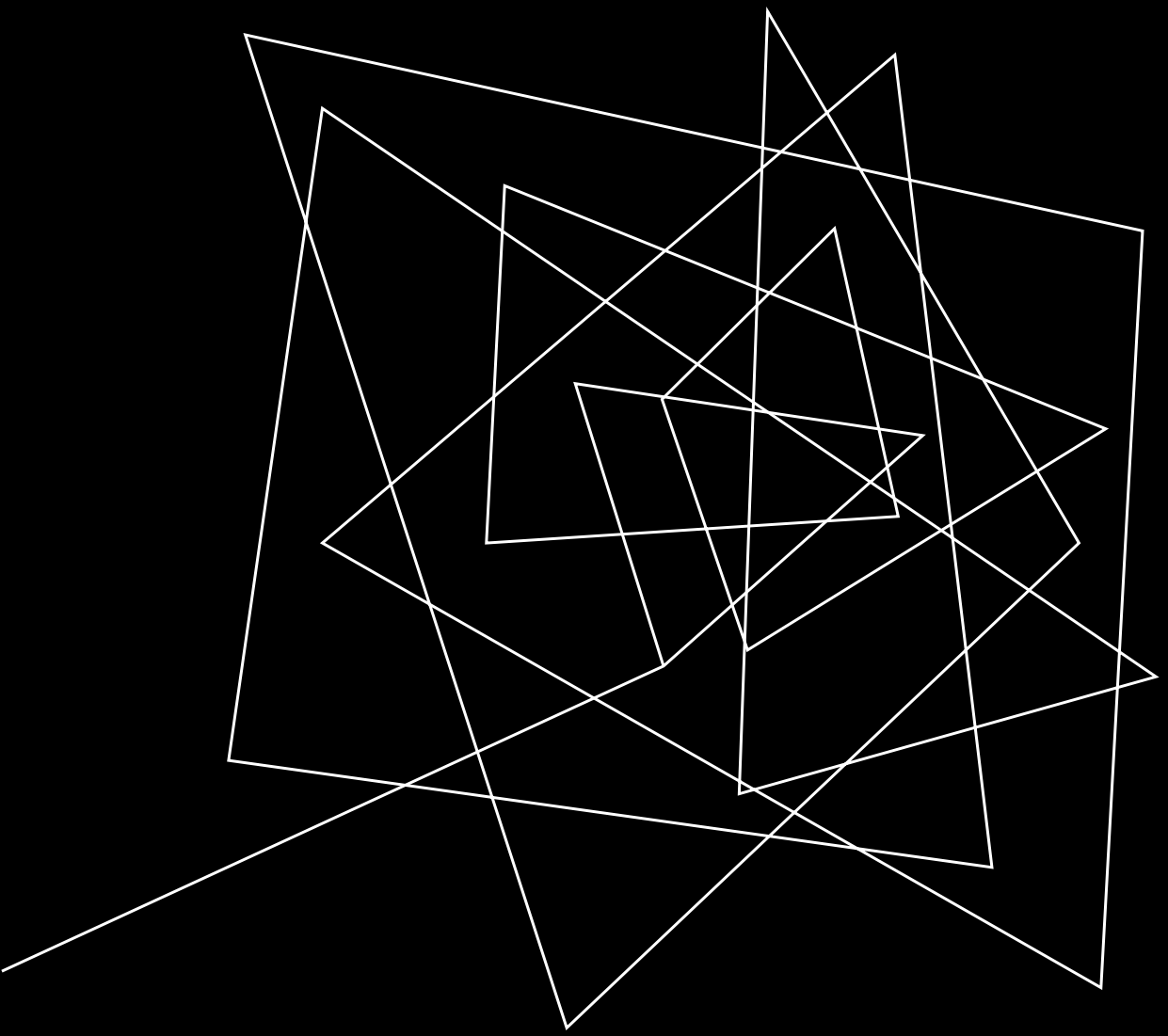
- Data standardization issues
  - BLS OEWS Occupation data wasn’t a good match with placement data’s position id
    - Position id was reported in the form of a text field so was essentially unusable

OBSTACLE

- Data standardization issues
  - 2nd iteration: Get access to ONET-SOC Code information in placement data to match to OEWS SOC (Standard Occupational Classification) code
    - Another obstacle:
      - Outdated SOC information in placement data
        - Data cleaning in R
      - Contains occupations BLS OEWS survey does not include so have to filter it out
        - E.g. armed services



DEMO



IMPACT

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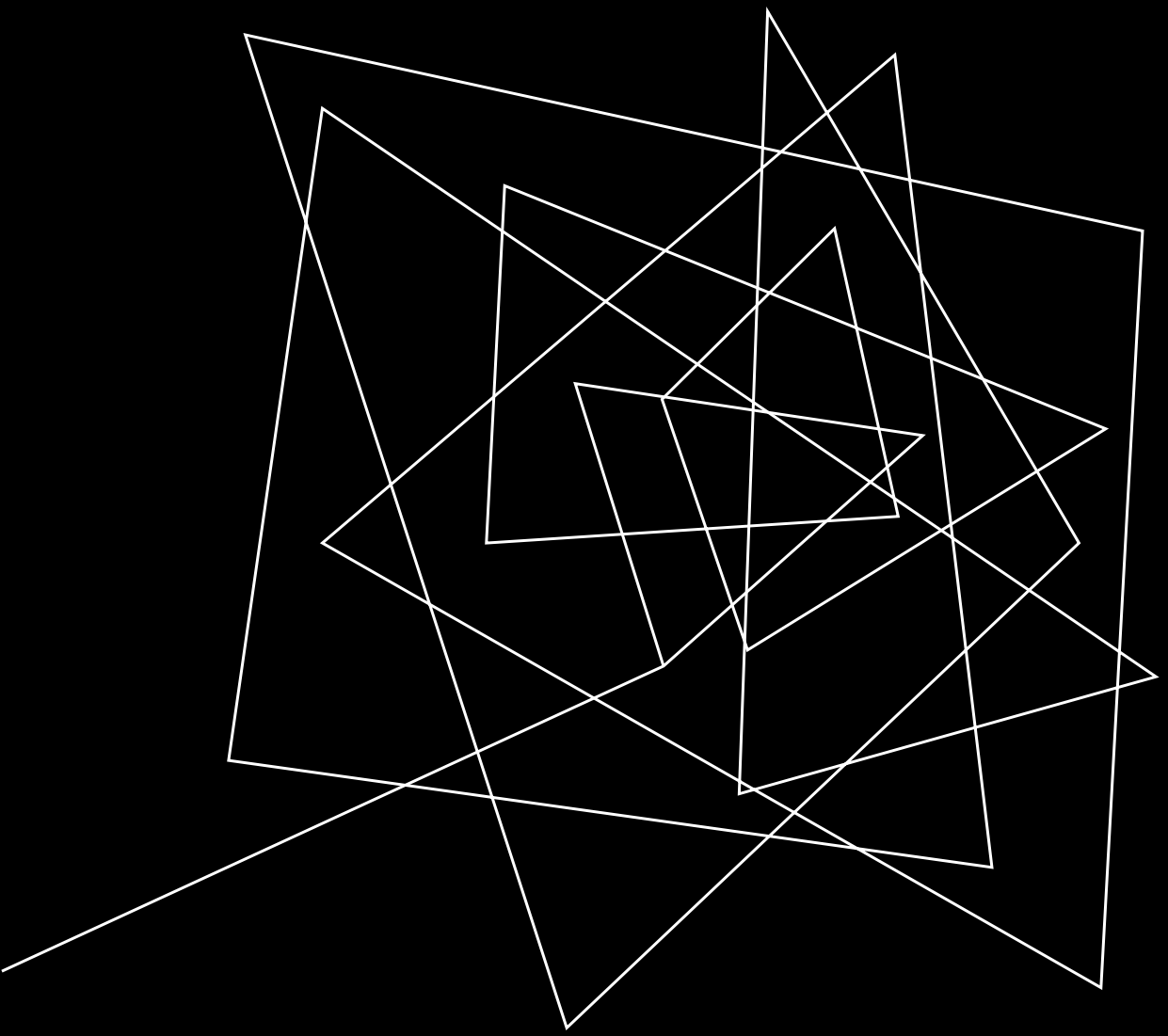
- Outreach purposes
- Opening training or making it more available depending on wage estimates and location quotient
- Comparing placement data with wage estimates to prompt further analysis



FUTURE DIRECTION

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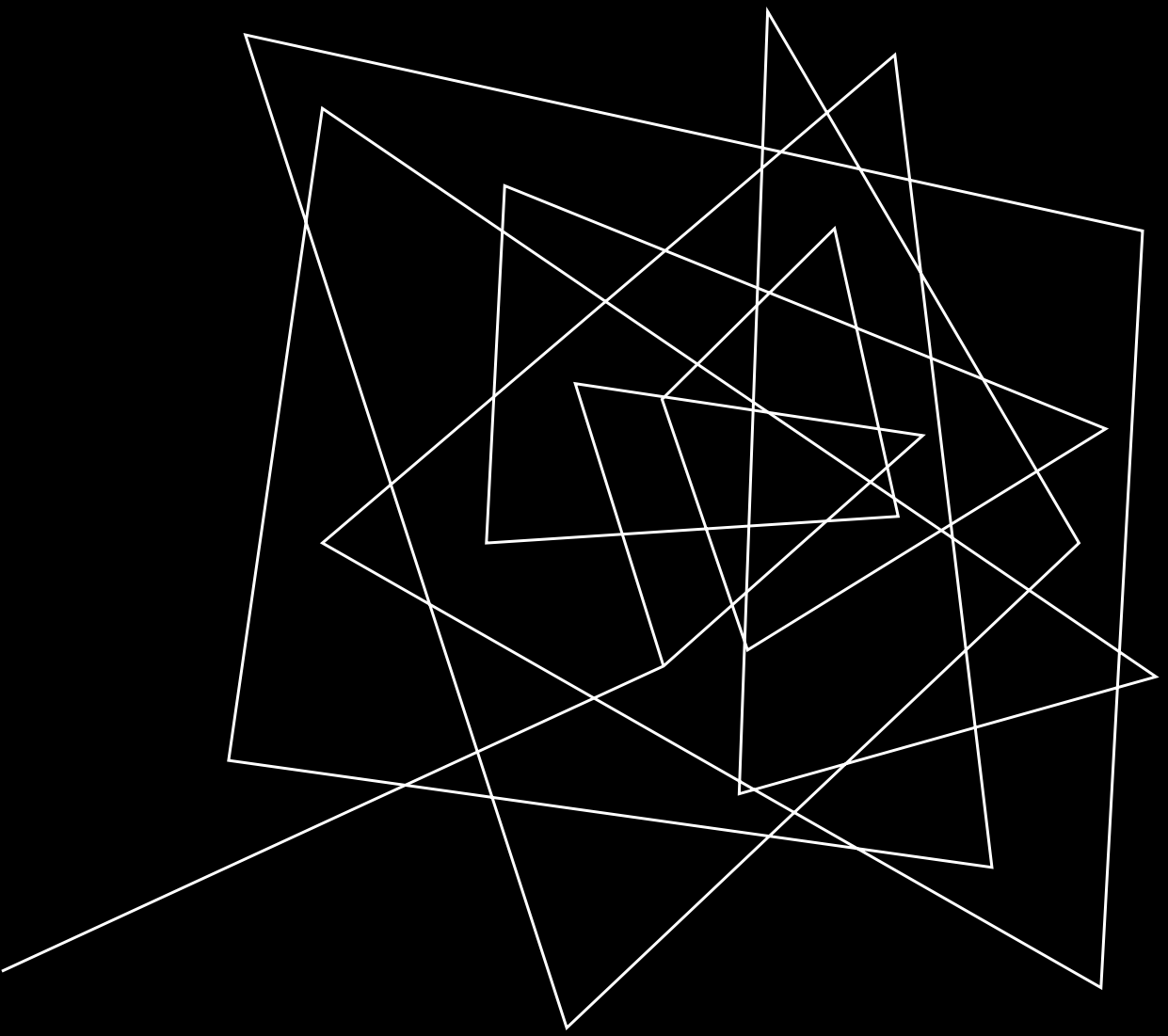
- Creating a standardized crosswalk between the ONET SOC Code and training programs OJC offers
- Updating the ONET SOC Code in the placement data to the latest
- Beginning talks of data standardization at the point of entry



WHAT I LEARNED

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- Developing data analytic tools is an ongoing process of improving based on feedback and adapting it to future needs
- Data sets have limitations
  - Have to see what the limitations are and how to mitigate them if possible
    - Implementing foundational changes to prevent future issues/limitations
  - Keep a positive focus on what is possible
- Important to go a step beyond and explore inconsistencies in data
- Replicable for the future
- Importance of validation

THANK YOU

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