# 1. Import Data

# 2. Data Mining

# 3. Preliminary Cleaning

## 3a. Cleaning Helper Function

## 3b. Blocks Table

## 3c. Transactions Table

## 3d. Transfers Table

## 3e. TheDAO Accounts Table

# 4. Data Exploration

## 4a. What is the highest block number in the system?

## 4b. What are the range of dates is there data for?

## 4c. How many ethers are currently in the system?

## 4d. How many unique addresses and transactions are there?

## 4e. Investigate MINED events

## 4f. Investigate UNCLE events

## 4g. Investigate CREATION events

## 4h. Investigate contract addresses behaviour

### Example 1: Contract account with highest creation value

### Example 2: Contract suicide

### Example 3: Contract that does nothing

### Example 4: Simple contract examination that interacts with no other users

## 4i. Examine contracts vs. non-contract transactions

# 5. Data Preparation

## 5a. Identify user types

### Identify the main Ethereum address

### Identify the DAO contract addresses

### Identify contract addresses

### Identify miner addresses

### Identify uncle addresses

### Identify user addresses

### Combine all user types

### Get stats on the identified users

## 5b. Update transfers table with user types

### Add fromType to transfers table

### Add toType to transfers table

## 5c. Extract the subgraph of relevant users

### Get list of transaction hashes without contracts involved

### Update transfers table

### Combine transactions that are split over blocks

### Find loss in information

## 5d. Extract both cores

### Get account stats

### Get LT core

### Get AU core

## 5e. Assign IDs to users

### Assign ids to LTcore

### Assign ids to AUcore

## 5f. Get number of daily transactions

### LT core

### AUcore

# 6. Weighted Adjacency Matrix

# 7. Principal Component Analysis

# 8. Data Validation

# 9. Data Visualization