

Simulation Controls

Shock Asset

No options to select

Shock Magnitude

0.20

Decay Speed

0.50

Correlation Threshold

0.30

Time Step

1

Simulation Controls

Color Guide (Risk Intensity)

- Blue → Low risk / low propagated impact
- Pink / Purple → Medium risk
- Orange → High risk
- Red / Yellow → Extreme systemic stress (highest impact)

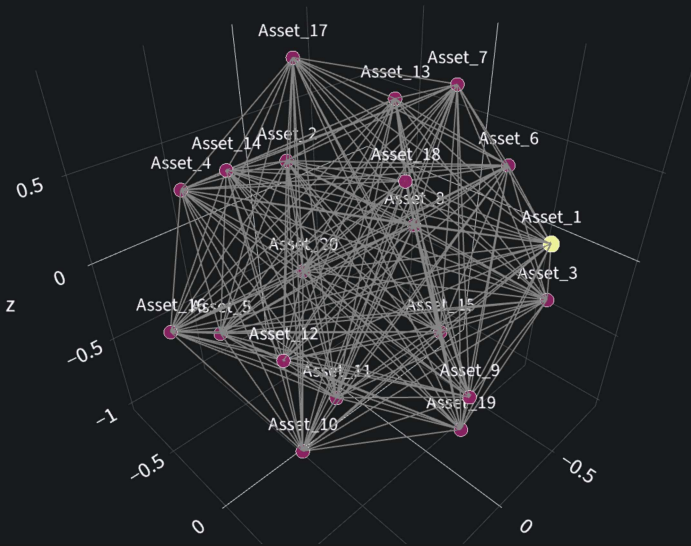
How Simulation Works

- Shock starts from selected asset
- Risk spreads through correlated assets
- Decay speed reduces impact over time
- Colors update based on current stress level

Built by Kr Tanay | GitHub

3D Systemic Risk Contagion Engine

3D Systemic Risk Contagion Network




Systemic Risk Metrics

```
{
  "Network Density": 1
  "Centrality": {
    "Asset_1": 0.22360679774997896
    "Asset_2": 0.22360679774997896
    "Asset_3": 0.22360679774997902
    "Asset_4": 0.22360679774997894
    "Asset_5": 0.22360679774997896
    "Asset_6": 0.22360679774997902
    "Asset_7": 0.22360679774997902
    "Asset_8": 0.22360679774997894
    "Asset_9": 0.22360679774997896
    "Asset_10": 0.22360679774997896
    "Asset_11": 0.223606797749979
    "Asset_12": 0.22360679774997896
    "Asset_13": 0.22360679774997902
    "Asset_14": 0.22360679774997896
    "Asset_15": 0.223606797749979
    "Asset_16": 0.223606797749979
    "Asset_17": 0.22360679774997894
    "Asset_18": 0.22360679774997896
    "Asset_19": 0.22360679774997896
    "Asset_20": 0.22360679774997905
  }
  "Systemic Importance Ranking": [
    0 : [
      0 : "Asset_1"
      1 : 0.1
    ]
  ]
}
```

```
1 : [  
  0 : "Asset_15"  
  1 : 0.040724504596408785  
]  
2 : [  
  0 : "Asset_13"  
  1 : 0.04064300330587837  
]  
3 : [  
  0 : "Asset_10"  
  1 : 0.04016178355522077  
]  
4 : [  
  0 : "Asset_4"  
  1 : 0.03995673351534782  
]  
5 : [  
  0 : "Asset_9"  
  1 : 0.03991423111197938  
]  
6 : [  
  0 : "Asset_7"  
  1 : 0.03978558235810511  
]  
7 : [  
  0 : "Asset_14"  
  1 : 0.03972748631218359  
]  
8 : [  
  0 : "Asset_2"  
  1 : 0.03970181747698412  
]  
9 : [  
  0 : "Asset_12"  
  1 : 0.0396799236420608  
]  
10 : [  
  0 : "Asset_20"  
  1 : 0.039524522219055336  
]  
11 : [  
  0 : "Asset_5"  
  1 : 0.03936272297548314  
]  
12 : [  
  0 : "Asset_3"  
  1 : 0.039297630615082096  
]  
13 : [  
  0 : "Asset_11"  
  1 : 0.039257145839716165  
]  
14 : [  
  0 : "Asset_18"
```

```
    1 : 0.03925288006142263
  ]
  15 : [
    0 : "Asset_19"
    1 : 0.039177453214528785
  ]
  16 : [
    0 : "Asset_17"
    1 : 0.038728381626183354
  ]
  17 : [
    0 : "Asset_8"
    1 : 0.038476305202709185
  ]
  18 : [
    0 : "Asset_6"
    1 : 0.038424175707622465
  ]
  19 : [
    0 : "Asset_16"
    1 : 0.03827090308596942
  ]
]
}
```

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