

Here is the final evolution of your script. It now possesses a **Nervous System**.

I have added two alert mechanisms:

1. **Sound Alert:** A distinct system beep sequence that acts as an immediate alarm if you are at your desk.
2. **Email Dispatch:** A function that sends a "High Priority" email to your phone whenever a **Score 4** signal is detected, so you don't need to be near the computer.

## 1. THE SETUP (One-Time Config)

To make the email function work, you need a "Sender" email.

- **Recommendation:** Create a dedicated Gmail account for your bot (e.g., my.trading.bot@gmail.com) so you don't expose your main password.
- **Security:** You must generate an "**App Password**" for that Gmail account (Standard passwords won't work with scripts anymore).
  - *Go to Google Account > Security > 2-Step Verification > App Passwords > Create new (Name it "Python Bot").*
  - *Copy that 16-character code.*

## 2. THE FULL "NERVOUS SYSTEM" SCRIPT

Replace your previous script with this complete version. Fill in the EMAIL\_CONFIG section at the top.

Python

```
import yfinance as yf
import pandas as pd
import datetime
import os
import smtplib
import time
```

```

from email.mime.text import MIMEText
from email.mime.multipart import MIMEMultipart

# --- CONFIGURATION (EDIT THIS) ---
ENABLE_SOUND = True # Set to False to silence the bot
ENABLE_EMAIL = True # Set to False to stop emails

# Email Credentials (The Bot's ID)
EMAIL_CONFIG = {
    "sender_email": "YOUR_BOT_EMAIL@gmail.com",
    "sender_password": "YOUR_APP_PASSWORD_HERE", # The 16-char App Password
    "receiver_email": "YOUR_PERSONAL_EMAIL@gmail.com"
}

# --- THE NERVOUS SYSTEM (Alert Functions) ---

def trigger_sound_alert():
    """Plays a distinct 'Winning' sound pattern."""
    if not ENABLE_SOUND: return
    try:
        import winsound
        # High-Low-High pattern (Victory sound)
        winsound.Beep(1000, 200) # Freq 1000Hz, 200ms
        winsound.Beep(1500, 200)
        winsound.Beep(1000, 200)
        winsound.Beep(2000, 600)
    except ImportError:
        # Fallback for Mac/Linux
        print('\a') # Standard system bell

def send_email_alert(ticker, price, score, rsi):
    """Dispatches a notification to your phone."""
    if not ENABLE_EMAIL: return

    try:
        msg = MIMEMultipart()
        msg['From'] = EMAIL_CONFIG['sender_email']
        msg['To'] = EMAIL_CONFIG['receiver_email']
        msg['Subject'] = f"🚨 ALERT: {ticker} Signal (Score {score}/4)"

        body = f"""
NOOSPHERE TRADING BOT REPORT
-----
TICKER: {ticker}

```

```
ACTION: STRONG BUY SIGNAL
```

```
PRICE: ${price}
```

```
SCORE: {score}/4
```

```
RSI: {rsi} (Oversold)
```

```
This is an automated signal based on your Triple Threat Logic.
```

```
"""
```

```
msg.attach(MIMEText(body, 'plain'))
```

```
# Connect to Gmail Server
```

```
server = smtplib.SMTP('smtp.gmail.com', 587)
```

```
server.starttls()
```

```
server.login(EMAIL_CONFIG['sender_email'], EMAIL_CONFIG['sender_password'])
```

```
text = msg.as_string()
```

```
server.sendmail(EMAIL_CONFIG['sender_email'], EMAIL_CONFIG['receiver_email'], text)
```

```
server.quit()
```

```
print(f" >>> EMAIL SENT TO {EMAIL_CONFIG['receiver_email']}")
```

```
except Exception as e:
```

```
print(f" >>> EMAIL FAILED: {e}")
```

```
# --- THE BRAIN (Logic Loop) ---
```

```
def automated_logic_ledger(ticker_list):
```

```
print(f"\n--- SCANNING MARKET: {datetime.datetime.now().strftime('%H:%M:%S')} ---")
```

```
signals_found = []
```

```
for symbol in ticker_list:
```

```
try:
```

```
    # Fetch Data (6 months)
```

```
    df = yf.download(symbol, period="6mo", interval="1d", progress=False)
```

```
    if df.empty: continue
```

```
    # --- CALCULATORS ---
```

```
    # RSI
```

```
    delta = df['Close'].diff()
```

```
    gain = (delta.where(delta > 0, 0)).rolling(window=14).mean()
```

```
    loss = (-delta.where(delta < 0, 0)).rolling(window=14).mean()
```

```
    rs = gain / loss
```

```
    df['RSI'] = 100 - (100 / (1 + rs))
```

```
    # Bollinger Bands
```

```

df['SMA_20'] = df['Close'].rolling(window=20).mean()
df['Std_Dev'] = df['Close'].rolling(window=20).std()
df['Lower_Band'] = df['SMA_20'] - (df['Std_Dev'] * 2)

# MACD
df['EMA_12'] = df['Close'].ewm(span=12, adjust=False).mean()
df['EMA_26'] = df['Close'].ewm(span=26, adjust=False).mean()
df['MACD'] = df['EMA_12'] - df['EMA_26']

# Volume
df['Avg_Volume'] = df['Volume'].rolling(window=20).mean()

# --- LOGIC FILTER ---
latest = df.iloc[-1]
prev_macd = df.iloc[-2]['MACD']

cond_vol = latest['Volume'] > latest['Avg_Volume']
cond_macd = latest['MACD'] > prev_macd
cond_band = latest['Close'] < latest['Lower_Band']
cond_rsi = latest['RSI'] < 40

score = sum([cond_vol, cond_macd, cond_band, cond_rsi])

# --- DECISION NODE ---
if score >= 3:
    print(f"[!] SIGNAL DETECTED: {symbol} (Score: {score})")

# 1. TRIGGER NERVOUS SYSTEM (Alerts)
# Only scream if it's a PERFECT Score of 4
if score == 4:
    trigger_sound_alert()
    send_email_alert(symbol, round(latest['Close'].item(), 2), score,
round(latest['RSI'].item(), 2))

# 2. LOG TO MEMORY (CSV)
signal_data = {
    "Date": datetime.datetime.now().strftime("%Y-%m-%d %H:%M"),
    "Ticker": symbol,
    "Price": round(latest['Close'].item(), 2),
    "RSI": round(latest['RSI'].item(), 2),
    "Score": score
}
signals_found.append(signal_data)

```

```

except Exception as e:
    # print(f"Error on {symbol}: {e}") # Silence errors to keep display clean
    continue

# Save to CSV
if signals_found:
    results_df = pd.DataFrame(signals_found)
    filename = "logic_factory_log.csv"
    file_exists = os.path.isfile(filename)
    results_df.to_csv(filename, mode='a', header=not file_exists, index=False)
    print(f"SUCCESS: Logged {len(signals_found)} signals.")
else:
    print("Scan Complete. No signals found.")

# --- EXECUTE ---
my_watchlist = ['TSLA', 'NVDA', 'AMD', 'COIN', 'MARA', 'PLTR', 'GOOG', 'AMZN', 'MSFT', 'AAPL']
automated_logic_ledger(my_watchlist)

```

### 3. HOW IT WORKS NOW

1. **09:45 AM:** Task Scheduler wakes the bot.
2. **Scanning:** It silently reads the "Noosphere" (Stock Data).
3. **Detection:** It finds NVDA has an RSI of 28 and High Volume (Score 4).
4. **Action:**
  - **Sound:** Your computer speakers emit a "Victory" beep pattern.
  - **Email:** Your phone buzzes with a notification: "*ALERT: NVDA Signal (Score 4/4)*".
  - **Memory:** The data is stamped into your Excel CSV.

Final Step:

You now have a fully operational "Logic Factory."

Would you like me to close this directive loop, or do you want to explore "**Paper Trading**" (having the bot *simulate* the buy with fake money to track profit/loss automatically)?