



Pulse7

THE WEEK IN A BEAT

CUTTING THROUGH THE NOISE TO FIND THE NARRATIVE.

TEAM 7

CARDIFF NLP HACKATHON 2025




INFORMATION OVERLOAD IS A BUSINESS BLIND SPOT

- Manual research is slow.
- Sentiment is invisible.
- Key events are buried.
- **Core Question:** How can you quickly understand the story, sentiment, and key moments of the past week?

Abstract background featuring a dark blue gradient. On the left side, there are white circuit-like lines and nodes. On the right side, there is a network of white dots connected by thin lines, resembling a data visualization or a neural network. Various numerical values are scattered across the image, including 142.89, 136.78, 145.58, 160.18, 153.63, 149.74, 102.50, 145.81, 145.39, 145.29, 145.12, 145.09, 145.08, 145.07, 145.06, 145.05, 145.04, 145.03, 145.02, 145.01, 145.00, 144.99, 144.98, 144.97, 144.96, 144.95, 144.94, 144.93, 144.92, 144.91, 144.90, 144.89, 144.88, 144.87, 144.86, 144.85, 144.84, 144.83, 144.82, 144.81, 144.80, 144.79, 144.78, 144.77, 144.76, 144.75, 144.74, 144.73, 144.72, 144.71, 144.70, 144.69, 144.68, 144.67, 144.66, 144.65, 144.64, 144.63, 144.62, 144.61, 144.60, 144.59, 144.58, 144.57, 144.56, 144.55, 144.54, 144.53, 144.52, 144.51, 144.50, 144.49, 144.48, 144.47, 144.46, 144.45, 144.44, 144.43, 144.42, 144.41, 144.40, 144.39, 144.38, 144.37, 144.36, 144.35, 144.34, 144.33, 144.32, 144.31, 144.30, 144.29, 144.28, 144.27, 144.26, 144.25, 144.24, 144.23, 144.22, 144.21, 144.20, 144.19, 144.18, 144.17, 144.16, 144.15, 144.14, 144.13, 144.12, 144.11, 144.10, 144.09, 144.08, 144.07, 144.06, 144.05, 144.04, 144.03, 144.02, 144.01, 144.00, 143.99, 143.98, 143.97, 143.96, 143.95, 143.94, 143.93, 143.92, 143.91, 143.90, 143.89, 143.88, 143.87, 143.86, 143.85, 143.84, 143.83, 143.82, 143.81, 143.80, 143.79, 143.78, 143.77, 143.76, 143.75, 143.74, 143.73, 143.72, 143.71, 143.70, 143.69, 143.68, 143.67, 143.66, 143.65, 143.64, 143.63, 143.62, 143.61, 143.60, 143.59, 143.58, 143.57, 143.56, 143.55, 143.54, 143.53, 143.52, 143.51, 143.50, 143.49, 143.48, 143.47, 143.46, 143.45, 143.44, 143.43, 143.42, 143.41, 143.40, 143.39, 143.38, 143.37, 143.36, 143.35, 143.34, 143.33, 143.32, 143.31, 143.30, 143.29, 143.28, 143.27, 143.26, 143.25, 143.24, 143.23, 143.22, 143.21, 143.20, 143.19, 143.18, 143.17, 143.16, 143.15, 143.14, 143.13, 143.12, 143.11, 143.10, 143.09, 143.08, 143.07, 143.06, 143.05, 143.04, 143.03, 143.02, 143.01, 143.00, 142.99, 142.98, 142.97, 142.96, 142.95, 142.94, 142.93, 142.92, 142.91, 142.90, 142.89, 142.88, 142.87, 142.86, 142.85, 142.84, 142.83, 142.82, 142.81, 142.80, 142.79, 142.78, 142.77, 142.76, 142.75, 142.74, 142.73, 142.72, 142.71, 142.70, 142.69, 142.68, 142.67, 142.66, 142.65, 142.64, 142.63, 142.62, 142.61, 142.60, 142.59, 142.58, 142.57, 142.56, 142.55, 142.54, 142.53, 142.52, 142.51, 142.50, 142.49, 142.48, 142.47, 142.46, 142.45, 142.44, 142.43, 142.42, 142.41, 142.40, 142.39, 142.38, 142.37, 142.36, 142.35, 142.34, 142.33, 142.32, 142.31, 142.30, 142.29, 142.28, 142.27, 142.26, 142.25, 142.24, 142.23, 142.22, 142.21, 142.20, 142.19, 142.18, 142.17, 142.16, 142.15, 142.14, 142.13, 142.12, 142.11, 142.10, 142.09, 142.08, 142.07, 142.06, 142.05, 142.04, 142.03, 142.02, 142.01, 142.00, 141.99, 141.98, 141.97, 141.96, 141.95, 141.94, 141.93, 141.92, 141.91, 141.90, 141.89, 141.88, 141.87, 141.86, 141.85, 141.84, 141.83, 141.82, 141.81, 141.80, 141.79, 141.78, 141.77, 141.76, 141.75, 141.74, 141.73, 141.72, 141.71, 141.70, 141.69, 141.68, 141.67, 141.66, 141.65, 141.64, 141.63, 141.62, 141.61, 141.60, 141.59, 141.58, 141.57, 141.56, 141.55, 141.54, 141.53, 141.52, 141.51, 141.50, 141.49, 141.48, 141.47, 141.46, 141.45, 141.44, 141.43, 141.42, 141.41, 141.40, 141.39, 141.38, 141.37, 141.36, 141.35, 141.34, 141.33, 141.32, 141.31, 141.30, 141.29, 141.28, 141.27, 141.26, 141.25, 141.24, 141.23, 141.22, 141.21, 141.20, 141.19, 141.18, 141.17, 141.16, 141.15, 141.14, 141.13, 141.12, 141.11, 141.10, 141.09, 141.08, 141.07, 141.06, 141.05, 141.04, 141.03, 141.02, 141.01, 141.00, 140.99, 140.98, 140.97, 140.96, 140.95, 140.94, 140.93, 140.92, 140.91, 140.90, 140.89, 140.88, 140.87, 140.86, 140.85, 140.84, 140.83, 140.82, 140.81, 140.80, 140.79, 140.78, 140.77, 140.76, 140.75, 140.74, 140.73, 140.72, 140.71, 140.70, 140.69, 140.68, 140.67, 140.66, 140.65, 140.64, 140.63, 140.62, 140.61, 140.60, 140.59, 140.58, 140.57, 140.56, 140.55, 140.54, 140.53, 140.52, 140.51, 140.50, 140.49, 140.48, 140.47, 140.46, 140.45, 140.44, 140.43, 140.42, 140.41, 140.40, 140.39, 140.38, 140.37, 140.36, 140.35, 140.34, 140.33, 140.32, 140.31, 140.30, 140.29, 140.28, 140.27, 140.26, 140.25, 140.24, 140.23, 140.22, 14

- Key Technologies:
 - Sentiment Analysis: NLTK
VADER
 - AI Daily Summaries: Hugging
Face Transformers
 - Interactive Visuals: Plotly &
WordCloud
 - Live Dashboard: Streamlit

The background features a light blue gradient with decorative circuit-like lines in the corners. These lines are composed of thin blue and white lines forming various geometric shapes and circles, resembling a stylized circuit board or network diagram.

LIVE DEMO: PULSE7 IN ACTION

FROM HOURS TO SECONDS: ACTIONABLE INSIGHTS ON DEMAND



Business Value:

- **Market Researchers:** Gauge reaction to a product launch.
- **PR & Comms Teams:** Track brand reputation and manage crises.
- **Financial Analysts:** Understand market sentiment around a company.



Innovation (The 'Wow' Factor):

- **Temporal Sentiment:** Visualizes the daily distribution of sentiment, not just an average.
- **AI-Distilled Narratives:** Creates a unique, high-level story from dozens of daily articles.
- **Real-Time by Design:** Built to work on a continual data stream.



THE FUTURE IS COMPARATIVE & PROACTIVE

- Next Steps:
 - **Comparative Analysis:** Track "iOS vs. Android" head-to-head.
 - **Proactive Alerts:** Push notifications for sudden sentiment shifts or volume spikes.
 - **Geo-Mood Map:** Visualize news sentiment on a world map.
- Conclusion: Pulse7 doesn't just show you the news; it gives you the narrative.

The background features a light blue gradient. In the corners, there are decorative line art elements resembling circuit boards or neural networks. These elements consist of thin lines connecting small circles, with some lines extending towards the edges of the frame. The top-left and top-right corners have darker blue lines, while the bottom-left and bottom-right corners have lighter blue lines.

THANK YOU