



Article Generation

Volleyball Match Summarization

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Terminology

- 3 to 5 sets
 - Score at least 25 points, win by two
- Stats
 - Kill
 - Block
 - Dig
 - Hitting Percentage

Goal

MEN'S VOLLEYBALL

HOME | SCHEDULE/RESULTS | ROSTER | STATS | COACHES | MORE [+]

Recap | Box Score

Stevenson University vs. Illinois Tech
@ Santa Cruz, CA (Kaiser Permanente)
1/12/2018 at 4:00 pm

Stevenson

3

Illinois Tech

0

FINAL	1	2	3	SCORE
Stevenson (2-0)	25	25	25	3
Illinois Tech (0-1)	23	22	15	0

Box Score

Play by Play

Coach's View

SET 1 1 2 3 4	~157~	ITMBV
STEVE		
STEVE starters: Landon Shorts; Logan Smiley; Aleks Melbardis; Alex Klum; Jason Gardner; Nate Reynolds; Ibero Derek Tangora.		
ITMBV starters: Kays; Easton; Kupiec; Lukasz; Coe; Cinjun; Throop; Daniel Robeck; Evan; Berch; Andry; Ibero Dostick; Derek.		
1-0	[Kupiec, Lukasz] Service error. Point STEVE	
2-0	[Landon Shorts] Service ace (Bostick, Derek). Point STEVE	
3-0	[Landon Shorts] Service ace (Bostick, Derek). Point STEVE	
4-0	[Landon Shorts] Service ace (Kupiec, Lukasz). Point STEVE	
	[Landon Shorts] Service error. Point ITMBV	
4-1	[Landon Shorts] Service error. Point ITMBV	
5-1	[Robeck, Evan] Kill by Logan Smiley (from Aleks Melbardis). Point STEVE	
6-1	[Alex Klum] Attack error by Kays. Easton (block by Jason Gardner; Nate Reynolds). Point STEVE	
	[Alex Klum] Kill by Coe, Cinjun (from Throop, Daniel). Point ITMBV	
6-2	[Berch, Andry] Kill by Logan Smiley (from Landon Shorts). Point STEVE	
8-2	[Jason Gardner] Service ace (Kupiec, Lukasz). Point STEVE	
	[Jason Gardner] Kill by Coe, Cinjun (from Throop, Daniel). Point ITMBV	
8-3	[Coe, Cinjun] Attack error by Jason Gardner. Point ITMBV	
8-4	[Coe, Cinjun] Kill by Nate Reynolds. Point STEVE	
10-4	[Logan Smiley] Kill by Landon Shorts (from Aleks Melbardis). Point STEVE	
Timeout Illinois Tech.		

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Box Score

Play by Play

Coach's View

Stevenson					Illinois Tech				
SET	K	E	TA	PCT	SET	K	E	TA	PCT
1	13	9	38	.139	1	11	2	27	.333
2	11	7	24	.167	2	7	5	22	.091
3	11	1	20	.500	3	8	7	26	.238

Stevenson														
ATTACK					SERVICE					BLOCK				
#	PLAYER	SP	K	E	TA	K%	A	SA	SB	RE	DIGS	BS	BA	BE
1	Landon Shorts	3	7	4	18	.167	1	8	9	1	4	2	0	0
3	Avery Engel	1	0	0	.000	0	0	0	0	0	0	0	0	0
4	Logan Smiley	3	10	3	24	.292	2	0	5	2	3	0	0	0
5	Aleks Melbardis	3	0	0	0	.000	14	0	1	0	1	0	0	0
9	Jared Chin	2	2	0	3	.667	15	0	1	0	2	0	0	0
10	Drew Dugette	1	1	0	1	1.000	0	0	0	0	0	0	0	0
11	Alex Klum	3	1	0	2	.500	0	1	0	0	1	1	0	0
12	Garrett Wiegall	1	1	1	2	.000	0	0	0	0	0	0	0	0
14	Garrett Wiegall	3	0	0	0	.000	0	0	0	0	0	0	0	0

MEN'S VOLLEYBALL

HOME | SCHEDULE/RESULTS | ROSTER | STATS | COACHES | MORE [+]

Box Score

Tough Opponent Downs Men's Volleyball in Opener

STEVENSON

3

ILLINOIS TECH

0

Posted: Jan 12, 2018

SANTA CRUZ, Calif. - The Illinois Tech men's volleyball team opened the 2018 season on Friday evening at UC Santa Cruz's Slug Slam. Taking on a tough Stevenson University team, the Scarlet Hawks were defeated in straight sets.

Scores

- Stevenson 3, Tech 0 (25-23, 25-22, 15-25)

How it Happened

- Stevenson jumped out to an 8-2 lead in the first set, but the young and resilient Scarlet Hawks came right back and quickly out the lead to three at 11-8. Playing the Mustangs tough, the Hawks used a .333 hit percentage in the set to pull to within one at 24-23. However, a Mustangs kill ended the set.
- In set two, things were even early on until the Scarlet Hawks took a substantial lead and 12-6. Tech was able to hold the lead for a while, but the Mustangs used a late 5-1 run to take a 21-20 lead. Stevenson did not relinquish the advantage and went up 2-0.
- Stevenson continued its momentum in the third set, scoring the first three points and never looking back en route to a 25-15 win.

Scarlet Hawk Standouts

- Cinjun Coe** led the Scarlet Hawks in kills (nine) and block assists (two) in his first collegiate match.
- Daniel Throop**, also playing his first collegiate match, tallied 20 assists.
- Evan Robeck** had a .375 hit percentage.
- Easton Kays** tallied three service aces to lead the team.

Stats to Know

- The Scarlet Hawks were outth: 237% to .160%.
- Stevenson had nine aces compared to Tech's five.
- Blocks were even at five.

Up Next

- Tech continues its California schedule with two more matches on Saturday. The Scarlet Hawks will take on host UC Santa Cruz at 3:00 p.m. central (1:00 p.m. pacific) before facing Cal Lutheran at 6:00 p.m. central (3:00 p.m. pacific).



GAME LEADERS

STEVENSON

K: Logan Smiley - 10

B: Landon Shorts - 2

D: Derek Tangorra - 14

SA: Landon Shorts - 6

ILLINOIS TECH

K: Cinjun Coe - 9

B: Cinjun Coe - 2

D: Derek Bostick - 8

SA: Easton Kays - 3

TEAM STATS

STEVENSON	ILLINOIS TECH
.237	Hitting % .160
4.0	Blocks 3.5
28	Digs 20
9	Aces 5

FULL STATS





Natural Language Generation

1. Content determination
2. Text structuring
3. Sentence aggregation
4. Lexicalisation
5. Referring expression generation
6. Linguistic realisation



Approach

- Web crawl 121 historical articles
 - 571 sets
 - 2862 sentences
- Vectorize the play-by-play data for each set and then cluster them
- Compute stat leaders and find notable performances
- Vectorize the play-by-play data for each set and classify them
- Generate sentences using templates that are based off of the language used in those clusters

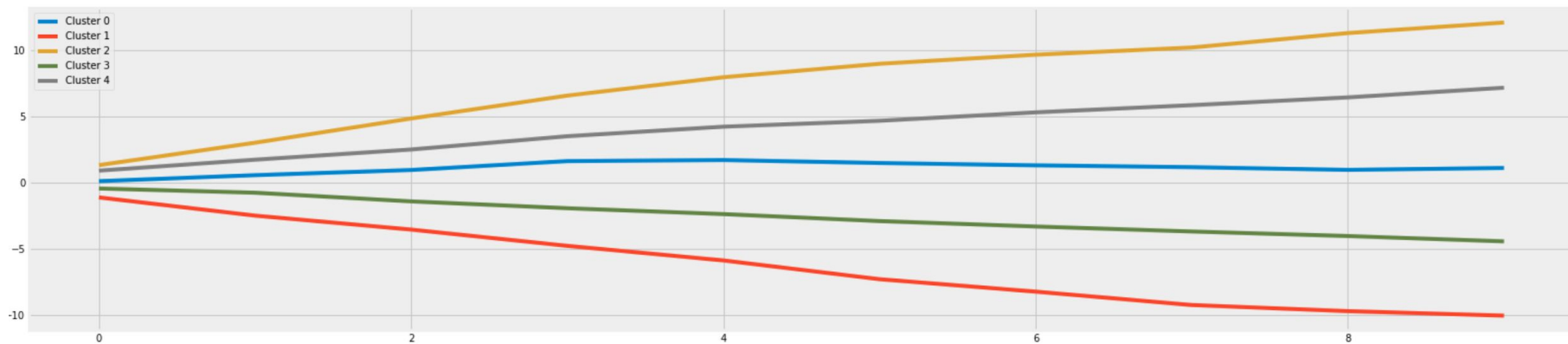


Clustering

- Creates list of the point differential after each play
- Creates a list of length 10, where each element is a sublist from the original list
 - [1, 2, 3, 4, 5, 6, 7, 8, 9]
 - [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
- Final vector is the list of the average value in each sublist
 - [2, 5, 8]



Clusters





Sections

- Title
- Introduction
- How It Happened
- Scarlet Hawk Standouts
- Stats To Know
- Up Next

Title Templates

```
def generate_title(info_dict, result, opponent, gender, num_sets):
    corpus = {
        # One Class for W
        "W": [
            "<GENDER>'s Volleyball <good-verb> <OPP>",
            "Scarlet Hawks <good-verb> <OPP>",
            "<GENDER>'s Volleyball <good-verb> <OPP> <SET-SCORE>",
            "Scarlet Hawks <good-verb> <OPP> <SET-SCORE>",
            "<GENDER>'s Volleyball Impresses In Win Over <OPP>",
            "<GENDER>'s Volleyball <good-verb> <OPP> in <NUM-SETS>-Set Match",
            "Scarlet Hawks <good-verb> <OPP> in <NUM-SETS>-Set Match"
        ],
        # One class for L
        "L": [
            "<bad-adj> Opponent <lose-verb> <GENDER>'s Volleyball",
            "<bad-adj> <OPP> team <lose-verb> <GENDER>'s Volleyball",
            "<GENDER>'s Volleyball Battles <bad-adj> Opponent",
            "<OPP> <lose-verb> <GENDER>'s Volleyball",
            "<GENDER>'s Volleyball Defeated by <OPP>",
            "<GENDER>'s Volleyball Falls to <OPP>",
            "<GENDER>'s Volleyball Drops <NUM-SETS>-Set Match at <OPP>"
        ],
        "bad-adj": ["Tough", "Strong", "Solid"],
        "lose-verb": ["Beats", "Tops", "Defeats"],
        "good-verb": ["Sweeps", "Shuts Out", "Cruises Past"]
    }
```

Introduction Templates

```
def generate_intro(info_dict, result, opponent, gender, num_sets):
    corpus = {
        "first": {
            "W": [
                "<LOCATION> - The Illinois Tech <GENDER>'s volleyball team <played-verb> <OPP>, <win-verb> in <NUM-SETS> sets.",
                "<LOCATION> - The Scarlet Hawks played <good-adj> <NUM-SETS>-set match against <OPP>.",
                "<LOCATION> - The Scarlet Hawks played <good-adj> <NUM-SETS>-set versus <OPP>, <win-verb> <SET-SCORE>"
            ],
            "L": [
                "<LOCATION> - The Illinois Tech <GENDER>'s volleyball team <lost-verb> <OPP>, <losing-verb> in <NUM-SETS> sets."
            ]
        },
        "second": {
            "W": [
                "The <event-noun> <moved-verb> Scarlet Hawks to a <RECORD> overall record on the season. "
            ],
            "L": [
                "<despite-np> the <result> <moved-verb> Scarlet Hawks to a <RECORD> overall record."
            ]
        },
        "played-verb": ["defeated", "beat", "outplayed", "outworked"],
        "win-verb": ["overcoming them", "winning the match"],
        "lost-verb": ["lost to", "were beaten by", "were defeated by", "couldn't beat", "couldn't overcome", "fell to"],
        "losing-verb": ["losing the match", "falling short"],
        "good-adj": ["a fun", "an exciting", "a great"],
        "event-noun": ["day's match", "day's event", "match", "game"],
        "moved-verb": ["has moved the", "moved the", "brings the", "has brought the"],
        "despite-np": ["Despite a strong effort,", "Despite a good performance,", "Despite their best efforts,",
                     "While the Hawks battled hard,", "While the Hawks worked hard,"],
        "result": ["loss", "tough loss", "match", "result"]
    }
}
```

Results

MEN'S VOLLEYBALL

Box Score

Men's Volleyball Defeated by Loras

LORAS		1	2	3	4	T	ILLINOIS TECH
3	Final						1
	LORAS (5-2)	44	25	24	25	3	
	ILLINOIS TECH (3-7)	42	19	26	20	1	

Posted: 05-03-2018

Chicago, Ill.(Keating Sports Cente) - The Illinois Tech Men's volleyball team fell to Loras, falling short in 4 sets. Despite their best efforts, the tough loss has moved the Scarlet Hawks to a (3-7) overall record.

Scores

- Illinois Tech 1, Loras 3 (42-44, 19-25, 26-24, 20-25)

How it Happened

- Loras prevailed in set 1 to take the set over Illinois Tech. The Scarlet Hawks held the lead for 18 points in the set. The set ended with a final score of 42-44.
- Loras stood their ground in set 2. Illinois Tech held the lead for 17 points in the set. The set ended with a final score of 19-25.
- In set 3, IIT played hard. They held the lead for 24 points. IIT held the lead to take the set 26-24.
- Loras didn't look back in set 4 to take the set over IIT. The Scarlet Hawks held the lead for 0 points in the set. The Scarlet Hawks couldn't prevail, falling to Loras 20-25.

Scarlet Hawk Standouts

- Lukasz Kupiec had an impressive outing with 18 kills.
- Derek Bostick dominated with 21 digs.
- Ben Peschl led the Scarlet Hawks in assists with 31.

Stats to Know

- IIT earned 72 digs while Loras ended the match with 74.
- Illinois Tech ended up with a team 0.196 attack percentage to Loras's 0.22.
- Loras racked up 6 aces while The Hawks racked up 2.

Up Next

- Illinois Tech will take on Fontbonne at Chicago, Ill. - Keating Sports Center on Sat. February 10, 2018.



GAME LEADERS		
LORAS		
K: Greg Kinney	-	21
B: Ian Walsh	-	10
D: Greg Kinney	-	18
SA: Mihajlo Gomez	-	2
ILLINOIS TECH		
K: Lukasz Kupiec	-	18
B: Evan Robeck	-	4
D: Derek Bostick	-	21
SA: Easton Kays	-	1
TEAM STATS		
LORAS	ILLINOIS TECH	
0.22	Hitting %	0.196
13.5	Blocks	8.0
74	Digs	72
6	Aces	2
BOX SCORE		

MEN'S VOLLEYBALL

Box Score

Men's Volleyball Battles Strong Opponent

LORAS		1	2	3	4	T	ILLINOIS TECH
3	Final						1
	LORAS (5-2)	44	25	24	25	3	
	ILLINOIS TECH (3-7)	42	19	26	20	1	

Posted: 05-03-2018

Chicago, Ill.(Keating Sports Cente) - The Illinois Tech Men's volleyball team lost to Loras, losing the match in 4 sets. While the Hawks worked hard, the result has moved the Scarlet Hawks to a (3-7) overall record.

Scores

- Illinois Tech 1, Loras 3 (42-44, 19-25, 26-24, 20-25)

How it Happened

- Loras didn't look back in set 1 to take the set over Illinois Tech. Illinois Tech tried hard, going on a 8-2 run to bring the score to 22-20. IIT couldn't prevail, falling to Loras 42-44.
- Loras prevailed in set 2. IIT held the lead for 17 points in the set. IIT couldn't prevail, falling to Loras 19-25.
- In set 3, The Scarlet Hawks played well. The Hawks went on a 9-1 run to build a 8-9 lead. The set ended with a final score of 26-24.
- Loras held the lead in set 4 to take the set over IIT. IIT played hard, but it wasn't enough to beat Loras. Illinois Tech couldn't prevail, falling to Loras 20-25.

Scarlet Hawk Standouts

- Lukasz Kupiec dominated with 18 kills.
- Derek Bostick tallied 21 digs.
- Ben Peschl (31) led the Scarlet Hawks in assists.

Stats to Know

- Loras had a team 0.22 attack percentage to The Hawks's 0.196.
- Loras had more digs than The Scarlet Hawks with 74 digs while The Scarlet Hawks ended up with 72.
- Illinois Tech had 0 kills to Loras's 0.

Up Next

- The Hawks will challenge Fontbonne on Sat. February 10, 2018 at Chicago, Ill. - Keating Sports Center.



GAME LEADERS		
LORAS		
K: Greg Kinney	-	21
B: Ian Walsh	-	10
D: Greg Kinney	-	18
SA: Mihajlo Gomez	-	2
ILLINOIS TECH		
K: Lukasz Kupiec	-	18
B: Evan Robeck	-	4
D: Derek Bostick	-	21
SA: Easton Kays	-	1
TEAM STATS		
LORAS	ILLINOIS TECH	
0.22	Hitting %	0.196
13.5	Blocks	8.0
74	Digs	72
6	Aces	2
BOX SCORE		

Results Cont.

MEN'S VOLLEYBALL

Box Score

Scarlet Hawks Sweep Fontbonne

FONTBONNE

ILLINOIS TECH

1	Final	1	2	3	4	T	3
	FONTBONNE (4-2)	19	19	25	22	1	
	ILLINOIS TECH (4-7)	25	25	23	25	3	

Posted: 05-03-2018

Chicago, Ill.(Keating Sports Centr) - The Scarlet Hawks played a great 4-set match versus Fontbonne, overcoming them 3-1 The game moved the Scarlet Hawks to a (4-7) overall record on the season.

Scores

- Illinois Tech 3, Fontbonne 1 (25-19, 25-19, 23-25, 25-22)

How it Happened

- Illinois Tech took set 1. They went on a 6-5 run to build a 24-19 lead. The Scarlet Hawks held the lead to take the set 25-19.
- In set 2, The Scarlet Hawks fought hard. The Hawks held the lead for 27 points. The Scarlet Hawks held the lead to take the set 25-19.
- Fontbonne didn't look back in set 3 to take the set over Illinois Tech. Illinois Tech fought hard, but it wasn't enough to beat Fontbonne. The set ended with a final score of 23-25.
- In set 4, Illinois Tech took the win. They held the lead for 40 points on their way to victory. Illinois Tech held the lead to take the set 25-22.

Scarlet Hawk Standouts

- Cinjun Coe had an impressive outing with 16 kills.
- Derek Bostick dominated with 13 digs.
- Daniel Throop tallied more assists than anyone else on the Scarlet Hawks with 43 assists.

Stats to Know

- IIT hit 0.213 compared to IIT's 0.084.
- Illinois Tech had more blocks than Fontbonne with 12.0 blocks while Fontbonne earned 8.0.
- The Hawks ended up with 3 aces while Fontbonne earned 3.

Up Next

- The Scarlet Hawks will face Maranatha Baptist on Sat. February 10, 2018 at Chicago, Ill. - Keating Sports Center.



GAME LEADERS

FONTBONNE

K: TJ Vorva - 7

B: Emir Hadzisalihovic - 4

D: Zach Rothstein - 20

SA: Jacob Lendy - 1

ILLINOIS TECH

K: Cinjun Coe - 16

B: Evan Robeck - 10

D: Derek Bostick - 13

SA: Easton Kays - 1

TEAM STATS

FONTBONNE		ILLINOIS TECH
0.084	Hitting %	0.213
8.0	Blocks	12.0
47	Digs	43
3	Aces	3

BOX SCORE



Looking Ahead

- Updating templates
 - Adding new stats
 - Increasing possible noun phrases and adjectives
 - Limiting redundancy
 - Combining simple sentences
- Different sports?