

### 1) Guest Speaker Summary

This lecture was provided by Geoffrey Simpson, who graduated from OSU with a Bachelor of Science in CS and his Masters of Business Administration. He also is the CEO and founder of Spiked Mace Software, SkaFlash and MoxieSoftware. His most successful product is Diner Connection, allowing hundreds and thousands of people to know when their table is ready at restaurants across the United States and Canada. Simpson's software applications have been featured in the Wall Street Journal, Mashable, FastCompany and Microsoft. He also won the Innovator of the Year award in 2011 from the Journal Record. His accumulated experience and knowledge are formidable. His story is special and sometime you can not even agree with any single point that he has given.

The entire lecture is about his career path, how he got into the business and how did he start his own company and his education. During this session, he kept asking us questions about what kind of developer are we, about our personality and career which we want to become. This helps us to set our dreams and goals which we never thought of due to our lack of real life experience and hesitate of choosing a path to walk on. After winning a developer contest on his business trip, he also showed us the good and bad side in this industry by how he got into his company brand name with a law issue and how he dealt with this incident.

Basically all of us enjoyed the lecture. It helps us gain a lot of confidence as well as real life experience in what we want to be in our career. The presentation is interesting and a lot of fun. Throughout his presentation, what stuck with me the most is when he stated that his successful branding is not by its good design but how he hustles and gets all the attention for his products.

2) a) Sequences 1: ACDB                      Sequence 2: BACD

b) \*\* Sequences 1: ACDB

Home > T1 > A > T2 > C > T2 > D > T1 > B > Home

$$\text{Home} > \text{T1} \quad \sqrt{(5-0)^2 + (2-0)^2} \sim 5.385$$

$$\text{T1} > \text{A} \quad \sqrt{(3-5)^2 + (2-2)^2} \sim 2$$

$$\text{A} > \text{T2} \quad \sqrt{(2-3)^2 + (6-2)^2} \sim 4.123$$

$$\text{T2} > \text{C} \quad \sqrt{(2-2)^2 + (4-6)^2} \sim 2$$

$$\text{C} > \text{T2} \quad \sqrt{(2-2)^2 + (6-4)^2} \sim 2$$

$$\text{T2} > \text{D} \quad \sqrt{(1-2)^2 + (1-6)^2} \sim 5.099$$

$$\text{D} > \text{T1} \quad \sqrt{(5-1)^2 + (2-1)^2} \sim 4.123$$

$$T1 > B \quad \sqrt{(1-5)^2 + (3-2)^2} \sim 4.123$$

$$B > \text{Home} \quad \sqrt{(0-1)^2 + (0-3)^2} \sim 3.162$$

**Total distance= 46.785**

**\*\* Sequence 2: BDAC**

Home > T1 > B > T2 > D > T1 > A > T2 > C > Home

$$\text{Home} > T1 \quad \sqrt{(5-0)^2 + (2-0)^2} \sim 5.385$$

$$T1 > B \quad \sqrt{(1-5)^2 + (3-2)^2} \sim 4.123$$

$$B > T2 \quad \sqrt{(2-1)^2 + (6-3)^2} \sim 3.162$$

$$T2 > D \quad \sqrt{(1-2)^2 + (1-6)^2} \sim 5.099$$

$$D > T1 \quad \sqrt{(5-1)^2 + (2-1)^2} \sim 4.123$$

$$T1 > A \quad \sqrt{(3-5)^2 + (2-2)^2} \sim 2$$

$$A > T2 \quad \sqrt{(2-3)^2 + (6-2)^2} \sim 4.123$$

$$T2 > C \quad \sqrt{(2-2)^2 + (4-6)^2} \sim 2$$

$$C > \text{Home} \quad \sqrt{(0-2)^2 + (0-4)^2} \sim 4.472$$

**Total distance = 34.487**

c) By using sequence 2, the total distance traveled is shorter.

d)

$k$   
 $\downarrow$

A	C	D	B
B	D	A	C

New sequence: ADAC & BCDB

A	D	A	C
B	C	D	B

e)

ADAC

Home > T1 > A > T2 > D > T1 > A > T2 > C > Home

$$\text{Home} > \text{T1} \quad \sqrt{(5-0)^2 + (2-0)^2} \sim 5.385$$

$$\text{T1} > \text{A} \quad \sqrt{(3-5)^2 + (2-2)^2} \sim 2$$

$$\text{A} > \text{T2} \quad \sqrt{(2-3)^2 + (6-2)^2} \sim 4.123$$

$$\text{T2} > \text{D} \quad \sqrt{(1-2)^2 + (1-6)^2} \sim 5.099$$

$$\text{D} > \text{T1} \quad \sqrt{(5-1)^2 + (2-1)^2} \sim 4.123$$

$$\text{T1} > \text{A} \quad \sqrt{(3-5)^2 + (2-2)^2} \sim 2$$

$$\text{A} > \text{T2} \quad \sqrt{(2-3)^2 + (6-2)^2} \sim 4.123$$

$$\text{T2} > \text{C} \quad \sqrt{(2-2)^2 + (4-6)^2} \sim 2$$

$$\text{C} > \text{Home} \quad \sqrt{(0-2)^2 + (0-4)^2} \sim 4.472$$

**Total distance = 33.325**

BCDB

Home > T1 > B > T2 > C > T2 > D > T1 > B > Home

$$\text{Home} > \text{T1} \quad \sqrt{(5-0)^2 + (2-0)^2} \sim 5.385$$

$$\text{T1} > \text{B} \quad \sqrt{(1-5)^2 + (3-2)^2} \sim 4.123$$

$$\text{B} > \text{T2} \quad \sqrt{(2-1)^2 + (6-3)^2} \sim 3.162$$

$$\text{T2} > \text{C} \quad \sqrt{(2-2)^2 + (4-6)^2} \sim 2$$

$$\text{C} > \text{T2} \quad \sqrt{(2-2)^2 + (6-4)^2} \sim 2$$

$$\text{T2} > \text{D} \quad \sqrt{(1-2)^2 + (1-6)^2} \sim 5.099$$

$$\text{D} > \text{T1} \quad \sqrt{(5-1)^2 + (2-1)^2} \sim 4.123$$

$$\text{T1} > \text{B} \quad \sqrt{(1-5)^2 + (3-2)^2} \sim 4.123$$

$$\text{B} > \text{Home} \quad \sqrt{(0-1)^2 + (0-3)^2} \sim 3.162$$

**Total distance = 33.177**

f) After calculated the total distance for 3 sequences, we could easily find that sequence 3 (BCDB) that has the least distance compared to its parents.