

Career Research Outline

I. Introduction

- A. Career exploration and the value of finding a fitting career
- B. Background information regarding Dean
- C. Thesis Statement:
 - 1. The ideal career for Dean Gadberry lies in the field of Computer Science. Dean is an exceptional problem solver, actively a self-starter, and enthralled by something new.

II. Interest In Computer Science

- A. Dean's History in Computer programming (Dean has already operated in this role)
 - 1. 8-year old writing batch files
 - 2. high school coding class
 - 3. classy closets
 - 4. NCTC comp sci tutoring position
- B. Formative conversations
 - 1. Taylor Voss
 - 2. Jeff McDonald
 - 3. Scott Chidester
 - 4. Various interactions online and in person inspired me

III. Skills and Abilities

- A. Problem solving
 - 1. pattern recognition
 - a. seeing the pattern in apology
 - b. the pattern in schooling and examinations
 - 2. exploiting patterns
 - a. quick to apologize
 - b. easy A's
 - 3. Others noticing
 - a. Research papers regard problem-solving as desirable skill
 - b. Jerred Caldwell's selection during programming
 - c. Jeff Pinkard

- d. asking whether there is a better way to do something gets him in trouble

B. Dean as a self-starter

1. parents once remarked that when he puts his mind to something, there is nothing which can stop him
2. dreams are easy, goals are hard
 - a. dean may not know the difference
3. time-frame to Utah
4. Google is fingertips away, might as well learn what the process is
5. always asking and willing to speak with anyone.

C. Dean enthusiastic about emerging ideas

1. affinity for gadgets
 - a. hand-me-downs
 - b. curious without caution
 - i. grabbing things out of people's hands in middle school
 - ii. touching things on someone's shelf at their house
2. computer as a window into new ideas
 - a. curious - would rather know the truth than to believe a lie
 - i. willingness to entertain many perspectives
 - ii. incessantly clicking on hyperlinks
 - b. social media allows new discoveries
 - i. trying opinions out until he is satisfied (something which continues)
 - ii. debate and discussion as personal values

IV. Computer Science Career Options

A. Web development

1. typical computer science student will be in this role
2. full-stack
 - a. html
 - b. css
 - c. javascript
 - i. react

- ii. vue js
 - iii. node js
- d. the rare ruby dev
- 3. Dean as a web dev or scrum master
 - a. proven ability via classy
 - b. dean often creates a system, so this would be a walk in the park

B. Cyber Security

- 1. network protocols
- 2. high-level management
- 3. exploits and zero-days
- 4. scripting and architecting
- 5. Dean as a cyber security analyst
 - a. attention to detail
 - b. something new daily
 - c. people to interact with
 - d. scripting and the ability to lose track of time

C. Integrated software development

- 1. low level programming
 - a. c
 - b. c++
 - c. assembly
- 2. applications in daily life
 - a. vehicles
 - i. self-driving (complex)
 - ii. bus stop display (simple)
 - b. hand-held devices
 - i. phones not so much
 - ii. garmin and spot
 - c. household appliances
 - i. televisions

- ii. smart thermostat
 - iii. refrigerators
- 3. industry-specific applications
 - a. high-level warehouse management needs nodes in which the web dev terminates and an API picks up
 - i. cameras
 - ii. scanners
 - iii. conveyors
 - iv. andons
 - b. machines which make everything!
- 4. Dean as an integrated software dev
 - a. problem-solving skills are required
 - b. learning about different micro chipsets
 - c. APIs and documentation

V. Industry Trends and Job Market Analysis

A. Always something new in Computer Science

- 1. Fireship
 - a. recent AGI developments
 - b. venture capital moving into new tech
- 2. Hacker News
 - a. job openings
 - b. personal showcasings
 - c. research findings

B. Junior Developers not welcome

- 1. as mentioned earlier, most software is moving to the web
- 2. abundance of innovation in this area is pushing new devs out
- 3. passion and experience becoming more essential

C. Specialization as a path to success.

- 1. Low level programming difficult for most
- 2. linux experience a plus

3. ability to create a rarity

D. Job growth

1. emerging fields in desperate need of help

2. management pays well

VI. Conclusion

A. Summarize qualifications

B. Dean actively pursuing Degree

C. Rephrase thesis statement: Dean Gadberry is ideally suited for a career in Computer Science due to his exceptional problem-solving skills, self-motivated nature, and enthusiasm for innovation.

D. With his drive, nothing stands in his way