

## CSCE-482: Senior Capstone Design—Student Questionnaire

Name: \_\_\_\_\_

UIN: \_\_\_\_\_ 18 January 2017

This questionnaire is being distributed to help us learn more about your interests, academic strengths and experiences. The information you provide will assist us in assigning you to the appropriate project.

### Question 1: Interests

The last page of this handout lists a number of Computer Science and Engineering specialties. Please select the top three areas that best describe your **interests**.

My first choice is \_\_\_\_\_

My second choice is \_\_\_\_\_

My third choice is \_\_\_\_\_

Do you like to explore hardware hacks? Are you a MAKER? Like to attend hackathons? Done any undergraduate research? A member of any computing clubs (e.g., TACS, Aggie Coding Club, Cybersecurity Club, etc.)?

### Question 2: Coursework

List the top three courses that you have enjoyed the most during your undergraduate studies.

The best course was \_\_\_\_\_

The second best course was \_\_\_\_\_

The third best course was \_\_\_\_\_

### **Question 3: Strengths**

Describe your **strengths**. For example, would you describe yourself as a person who enjoys writing practical software, or a person who studies algorithms, along with theory and analysis more? Are you better at creating, analyzing or implementing solutions? Are you a bottom-up or a top-down person? How are your communication skills?

### **Question 4: Specific skills**

Describe any hands-on **skills** (e.g., programming languages, software packages, design tools) that would make you attractive to a potential employer.

### **Question 5: Experience**

Describe any **experiences** (e.g., internships, co-ops, undergraduate research, and general employment) that may complement your academic credentials.

## Question 6: Technical breadth

Have you programmed as networked communication software using TCP/IPsockets?

Have you worked with sensors like cameras, the kinect, or accelerometers before?

Have you worked with any embedded hardware, such as arduinos, raspberry PI modules, etc?

Any a projects from outside class you'd like to mention? (e.g, home brewing, hacked drones, etc.)

## Question 7: Leadership preference

One of the members of each team will act as the leader. In addition to performing technical tasks, the leader has additional responsibilities, which include scheduling team building activities, facilitating discussions and brainstorming sessions, helping resolve conflicts, monitoring progress (both individual and group), milestones, and ensuring equal distribution of workload across team members. Would you like to be considered for a leadership role in your team? If so, why? If not, why not?

## Question 8: Math modeling skills

For each of the following theoretical and mathematical subdisciplines, describe your level of proficiency (e.g., 'mostly ignorant', 'took a class, did poorly', 'enjoy', 'good', 'very good')

Calculus: \_\_\_\_\_

Combinatorics: \_\_\_\_\_

Differential equations: \_\_\_\_\_

Discrete math: \_\_\_\_\_

Automata theory: \_\_\_\_\_

Probability: \_\_\_\_\_

Statistics: \_\_\_\_\_

Linear algebra: \_\_\_\_\_

Logic: \_\_\_\_\_

### **Question 9: Enemies**

Are there any people in the class that you would strongly dislike being grouped with?

### **Question 10: Projects ideas you wish to propose (optional)**

Do you have any project that you're itching to do? (Don't worry too much about scope and difficulty in writing a response, some ideas or aspects of the ideas proposed in this section will be mashed into assigned topics and, accordingly, adjusted by the instructor.)

**TH** Theory, parallel algorithms, algorithms, combinatorics, optimization, cryptography, theoretical computer science

**Chi+** Human computer interaction, multimedia, cognitive modeling, hyper/multi media/text, digital libraries

**CSys** Computer systems, computer architecture, resilient systems, fault tolerance, VLSI

**NetDis** Networks, communications, distributed systems/computing, computer communication, distributed/concurrent systems, telecommunications, high speed network, scalable infrastructure, security, cryptography Web, Internet, XML, HTML, e-commerce

**RT** Real-time systems, embedded computers/systems

**OS** Operating systems, remote computing, cooperating processes

**SW** Software engineering, software, distributed agents, intelligent agents, object oriented model design, formal methods, software metrics

**CmplLang** Compilers (often parallel), language design

**DB** Database, distributed DB, DB management systems, OODB, information systems

**IS/R** Information storage and retrieval, data mining

**AI/ap** Artificial intelligence, neural nets, fuzzy logic, machine learning, intelligent agents, virtual reality, data mining

**CSE** Computational science/engineering, computational mathematics, numerical analysis/computing, scientific computing, simulation, high performance computing

**Gr/Viz** Computer vision, image processing, imaging, graphics

**Rob** Manufacturing automation, robotics, industrial automation, sensors

**Other** Any other specialties not included in this list (please specify)