CONSENT DOCUMENT FOR ENROLLING ADULT PARTICIPANTS IN A RESEARCH STUDY

Georgia Institute of Technology

Project Title: Manufacturing and Design Feedback Tool Assessment

Investigator: T. Kurfess, C.Saldana

Protocol Title: Protocol for Manufacturing and Design Feedback Tool Assessment

You are being asked to be a volunteer in a research study.

<u>Purpose:</u> The purpose of this study is to determine the effects of instantaneous digital manufacturing feedback on design innovation measures. We expect to enroll 250 people in this study.

Exclusion/Inclusion Criteria: Participants must be 18 years of age and have an interest in design and/or manufacturing, be involved in a student design team, or be involved in an engineering design course.

Procedures: If you decide to be in the study, your part will involve a design exercise. At the beginning and end of the study, you will complete a design warm up activity centered on rapidly designing or redesigning an everyday object. During this study, you will be asked to complete a design and manufacturing activity centered on (1) specifying the manufacturing sequence for a given product design and (2) designing a new product to accomplish a given task with the aid of a web-based manufacturability analysis tool. You will also use a manufacturing feedback tool to understand the effects of design choices on manufacturability. Afterwards, you will fill out qualitative surveys to determine whether access to manufacturing feedback applications result in better design decisions and outcomes. You may stop participation at any time and may take an alternative design assignment for course participation. Please contact Dr. Saldana directly if you wish to take an alternative assignment.

<u>Risks or Discomforts:</u> The risks involved are no greater than those involved in daily activities associated with this course, including homework and project-based assignments.

Benefits: Participants will gain a better understanding of their individual problem solving styles, as well as be exposed to new information-rich, integrated design and manufacturing methodologies. This information could aid in team creation or work, understanding of coping behavior, design work, and school projects success. For student startups these studies may aid in ability to understand and recognize pivotal problems, pivot around these problems, and succeed as an organization.

<u>Confidentiality:</u> Your privacy will be protected to the extent allowed by law. To protect your privacy, your records will be kept under a code number rather than by name. Your records will be kept in locked files and only study staff will be allowed to look at them. Your name and any other fact that might point to you will not appear when results of this

study are presented or published. We are only interested in group information. The reporting of the experimental results will only contain group mean results and will contain no personal information about individual participants including performance on the experiment. To make sure that this research is being carried out in the proper way, the Georgia Institute of Technology IRB may review study records.

Costs to You: There are no costs to you, other than your time, for being in this study.

<u>In Case of Injury/Harm:</u> If you are injured as a result of being in this study, please contact Principal Investigator at telephone (404) 385-0959. Neither the Principal Investigator nor Georgia Institute of Technology has made provision for payment of costs associated with any injury resulting from participation in this study.

Participant Rights:

- Your participation in this study is voluntary. You do not have to be in this study if you don't want to be.
- You have the right to change your mind and leave the study at any time without giving any reason and without penalty.
- Any new information that may make you change your mind about being in this study will be given to you.
- You will be given a copy of this consent form to keep.
- You do not waive any of your legal rights by signing this consent form.

Questions about the Study: If you have any questions about the study, you may contact Dr. Saldana. Investigator at telephone (404) 385-3735 or csaldana6@gatech.edu."

Questions about Your Rights as a Research Participant: If you have any questions about your rights as a research participant, you may contact Ms. Melanie Clark, Georgia Institute of Technology, Office of Research Integrity Assurance, at (404) 894-6942 or Ms. Kelly Winn, Georgia Institute of Technology, Office of Research Integrity Assurance, at (404) 385-2175.

If you sign below, it means that you have read (or have had read to you) the information given in this consent form, and you would like to be a volunteer in this study.

A. B...)

Participant Name (printed) Participant Signature	Studio Section (e.g., Date
Person Obtaining Consent	Date