Problem Statement and Goals
Measuring Microstructure Changes During Thermal Treatment

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Table 1: Revision History

Date	Developer(s)	Change
Sept 25	Edwin Do	Initial commit with names
...	...	...

1 Problem Statement

The Department of Materials Science and Engineering would like to measure the microstructure changes during thermal treatment by looking at the conductivity changes in real-time when a sample undergoes thermal treatment. The changes can occur very quickly and it is crucial to read real-time data at a high enough acquisition rate. The equipment We need to create an application that is compatible with the window's based computer in the Department of Materials Engineering. This computer has a port that is compatible with the existing nano-voltmeter. In addition, the application must be able to read and display real-time data at a high acquisition rate to provide the most accurate data.

[You should check your problem statement with the problem statement checklist. —SS] [You can change the section headings, as long as you include the required information. —SS]

1.1 Problem

1.2 Inputs and Outputs

[Characterize the problem in terms of "high level" inputs and outputs. Use abstraction so that you can avoid details. —SS]

1.3 Stakeholders

The stakeholders of this project include Dr. Hatem Zurob (Supervisor) and anyone who is interested in observing the resistivity values in microstructures.

1.4 Environment

The environment of this project includes the use of a current source, nanovoltmeter, a Window's based computer provided by the Department of Materials Engineering and Science.

2 Goals

Goal	Reason	How to measure
Description of goal	Reasoning	Measuring method

3 Stretch Goals

Goal	Reason	How to measure
Description of goal	Reasoning	Measuring method