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|  | **SURF Student Colloquium**  NIST – Gaithersburg, MD  August 7-9, 2018 | | |
| **Name:** Lela Bones | | **Award Number** | 70NANB18H103 |
| **Academic Institution:** Salisbury University | | **Major:** Computer Science and Mathematics | |
| **Academic Standing (Sept. ‘18):** | Junior @ Salisbury University | | |
| **Future Plans (School/Career):** | Attending graduate school with a research focus on brain computer interfacing (BCI) | | |
| **NIST Laboratory, Division, and Group:** | Engineering Laboratory, System Integration, Information Modeling and Testing | | |
| **NIST Research Advisor:** | Thurston Sexton | | |
| **Title of Talk:** | (WORK IN PROGRESS) | | |
| **Abstract:**  Smart Manufacturing aims to employ high levels of adaptability and computer systems to optimize the process of generating and producing goods. Industry has made a huge push towards smart manufacturing, however not every company has the budget or resources to make the transition. Nestor, a tagging app that uses machine learning (ML) and natural language processing (NLP) techniques to tag and structure very unorganized maintenance logs, aims to help with this transition. Nestor is open source and works with the maintenance technicians to simplify and speed up the categorizing and visualizing of maintenance databases. Because of the culture that manufacturing has surrounding data and licenses, it is hard to have sufficient data to demonstrate Nestor. My research goals are to use the structured databases that comes from Nestor to build a visualization dashboard and to generate open source unorganized databases to test on Nestor and in the dashboard. Data is ultimately useless without being able to properly visualize and understand the data. With my dashboard users will easily be able to load the document they generate through Nestor and receive a dashboard that easily visualizes their data. | | | |