



Organization: Advanced Information Collaboratory, UMD College Park School of Information Studies

Primary mentor: Gregory Jansen

Secondary mentor(s): Richard Marciano

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| Project Title | Impact of Japanese American Segregation during WWII on Sacramento |
| Description | The incarceration of Japanese Americans during WWII left behind digital traces in the extensive records of the War Relocation Authority. This project attempts to further trace the impact of incarceration on the city of Sacramento, through extraction of information from the 1940 and 1950 US Census records, combining that information with WRA records, analysis, and visualization. This project extends the digital curation work of AIC in this area over the past several years. |
| Problems/ Research Questions | How can demographics be reliably and automatically extracted from census population schedules, specifically for the purpose of identifying Japanese households in 1940 and 1950? RQ: What computational techniques can we use to identify relevant rows in census records. Additionally the resulting data will be mapped onto a geographical representation of Sacramento in GIS and analysis will proceed to explore the impact and narrative of community impacts. RQ: What was the community impact of incarceration on Sacramento? |
| Techniques | <ul style="list-style-type: none"> ● computer vision for document segmentation ● machine learning for handwriting text recognition (HTR) ● optical character recognition tools (OCR) |
| Tools/ | <ul style="list-style-type: none"> ● Tesseract ● Transkribus.eu |

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| Languages used | <ul style="list-style-type: none"> ● Open Computer Vision (OpenCV) ● Python Image Library (Pillow) ● Jupyter Lab ● Pandas Data Analysis |
| Data | <p>Description: 1950s and 1940s Census images for Sacramento Data Type: TIFF Image Files Data Size: Several thousand hi-rez document images</p> <p>Description: War Relocation Authority Tabular Datasets Data Type: Comma-separated Text Files Data Size: Hundreds of thousands of records</p> |
| Outcome | <p>Fellow(s) will produce a unique analysis of the migration patterns of Japanese American households in Sacramento during and after their relocation and incarceration during World War II.</p> |
| Milestone Timeline | <ul style="list-style-type: none"> ● Onboarding for use of Jupyter Lab, Python, and Pandas ● Familiarity with and loading of WRA record data ● Familiarity with US census records and understanding of image processing techniques employed by team notebooks |
| References | <p>Previous LEADING fellows project: Jupyter Notebooks Japanese American WWII History: Densho Encyclopedia</p> |