UDACITY

PROJECT SPECIFICATION

Build a Sign Language Recognizer

PART 1: Data

CRITERIA	MEETS SPECIFICATIONS
Prepare data for modeling	1. Student provides correct alternate feature sets: delta, polar, normalized, and custom. 2. Student passes unit tests. 3. Student provides a reasonable explanation for what custom set was chosen and why (Q1).

PART 2: Model Selection

CRITERIA	MEETS SPECIFICATIONS
Implement model selection techniques	1. Student correctly implements CV, BIC, and DIC model selection techniques in “my_model_selectors.py”. 2. Student code runs error-free in notebook, passes unit tests and code review of the algorithms. 3. Student provides a brief but thoughtful comparison of the selectors (Q2).

PART 3: Recognizer

CRITERIA	MEETS SPECIFICATIONS
Recognize ASL words	1. Student implements a recognizer in “my_recognizer.py” which runs error-free in the notebook and passes all unit tests 2. Student provides three examples of feature/selector combinations in the submission cells of the notebook. 3. Student code provides the correct words within <60% WER for at least one of the three examples student provided. 4. Student provides a summary of results and speculates on how to improve the WER.

Suggestions to Make Your Project Stand Out!

PART 4: (OPTIONAL) Improve the WER with Language Models

The recognizer you implemented in Part 3 is equivalent to a "0-gram" SLM. Improve the WER with the SLM data provided with the data set in the link above using "1-gram", "2-gram", and/or "3-gram" statistics.

Project Reviewer Certification Course Reviewer FAQ Student FAQ Reviewer Agreement