Below is a large list of possible datasets. For a number of them, I have included an idea for what a project using the data could be. These are meant to be starting points for your own ideas.

Using AI to brainstorm prompt:

You are my class advisor and tutor for an undergraduate senior-level Neuroscience class that is focused on data analytics. Your job is to support me into my research by helping me find sources, brainstorm, and generate ideas for my project. The specific project in question is to use analyze an open scientific dataset and write a report on my results. I must come up with the type of analysis for this project. It needs to be a graduate-level project submission, and as a class advisor, you are happy to support me into finding sources for this and generating research ideas. I am specifically interested in these datasets of mri scans of alzheimers patients: https://oasis-brains.org/#data First, I would like for you to find me other possible datasets that I could use. Then, I would like you to think of original, novel ideas for how to analyze this data. Please make them original and wow-ing, and something that a graduate school audience would find incredible. Thank you

- Psychology/cog neuro datasets
 - Orphaned data | Štěpán Bahník (bahniks.com)
 - Perceived morality of euthanasia
 - Choice blindness and product choice
 - Debiasing the base rate neglect
 - Project idea: reach out to the professor here and see if they will share the data so that you can finish the project
 - OpenData (nivlab.github.io)
 - Variety of attention and decision making datasets
 - Project idea: How do different interventions affect performance on the go/no go task
 - Eye tracking data on reading
 - What is MECO? MECO (meco-read.com)
 - Project idea: Are there eye tracking differences based on the language, length of word, length of written document? Do they transfer when a reader speaks more than 1 language?
 - <u>Keith Rayner Eye Movements in Reading Data Collection | Collection |</u>
 <u>Library Digital Collections | UC San Diego Library (ucsd.edu)</u>
 - OSF | The Provo Corpus: A Large Eye-Tracking Corpus with Predictability Norms
 - OSF | Potsdam Textbook Corpus

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- Open psychological stimulus sets and datasets Google Sheets
- Neuroscience datasets
 - Neurophysiology
 - DANDI Archive
 - Visual Behavior Neuropixels brain-map.org
 - Neuro imaging datasets

- THINGS-data: A multimodal collection of large-scale datasets for investigating object representations in human brain and behavior | bioRxiv
- OpenNeuro
 - Project idea: How much of FFA activation variation when viewing faces can be explained by the task or face vs what is individual differences
- <u>Data Hosting & Sharing: The Open MEG Archive (OMEGA) | McConnell</u> Brain Imaging Centre - McGill University
- Studyforrest.org
- MRI Donor Data :: Allen Human Brain Atlas :: Allen Brain Atlas: Human Brain (brain-map.org)
- ERP CORE ERP Info
- Search | Kaggle
 - Project idea: Look for science related competitions on kaggle, take a stab at completing them
- Collection of neuro datasets
 - inezpereira/open-neuroscience (github.com)
 - Project idea using oasis brains dataset: Determine predictive markers of Alzheimers and test how they correlate with levels of diagnosis
 - meagmohit/EEG-Datasets: A list of all public EEG-datasets (github.com)
 - PhysioNet Databases

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- Neuronal Gene expression
 - https://cengen.shinyapps.io/CengenApp/
- Parkinsons freezing of gait kaggle comp
 - Parkinson's Freezing of Gait Prediction | Kaggle
 - Project idea: Can you build a machine learning model that detects freezing of gait episodes?
- Biomechanics
 - OSF | Self-paced versus fixed-paced treadmill walking energetics
 - modenaxe/awesome-biomechanics: A curated, public list collecting resources for biomechanics and human motion: datasets, processing tools, software for simulation, educational videos, lectures, etc. (github.com)
 - Project idea: Combine data from balance datasets and perform PCA to look for underlying sway components
 - BML-MoVi BioMotionLab
 - A number of gait datasets: <u>From the newsletter Going through the</u> (loco)motions: Open science and public data - ISPGR
 - The Effect of Walking Incline and Speed on Human Leg Kinematics, Kinetics, and EMG | IEEE DataPort (ieee-dataport.org)

- A public dataset of overground and treadmill walking kinematics and kinetics in healthy individuals [PeerJ]
- Text
 - Journal article reviews: <u>Lakens/open_peer_review (github.com)</u>
 - o Rate My Professors | Kaggle
 - Project Idea: Categorize course comments to determine what makes a good professor
 - Project idea: Collect Author names from a conference and analyze gender/race trends over time using namsor/namsor-python-tools-v2: NamSor Python command line tools, to append gender, origin, diaspora or us 'race'/ethnicity to a CSV file. (github.com)
- Neuron simulations
 - DynaSim Getting Started Tutorial · DynaSim/DynaSim Wiki (github.com)
 - The Brian Simulator | The Brian spiking neural network simulator
 - Project Idea: Create a computational model of a spatial memory circuit, including grid and place cells
- Biology
 - Lots of genetic datasets
 - GitHub OpenGene/awesome-bio-datasets: awesome-bio-datasets
 - Project idea: Map how a particular gene or set of genes varies across the world
 - Home GEO NCBI (nih.gov)
 - Tracking data of sea animals
 - OCEARCH Shark Tracker
 - List of biological databases Wikipedia
- Chemistry
 - kjappelbaum/awesome-chemistry-datasets: overview of datasets for ML in chemistry (github.com)
- General collections
 - awesomedata/awesome-public-datasets: A topic-centric list of HQ open datasets.
 (qithub.com)
 - Includes datasets from biology, chemistry, neuroscience, psychology, and more