Employment Trend Analysis 2023 - 2033

Is Al taking our jobs or transforming them?

About This Project

The project is organized as a Python project with five Jupyter notebooks, each aligned with a project milestone. Data was collected from flat files, web pages, and APIs, then cleaned, transformed, and loaded into a SQLite database. This database is connected

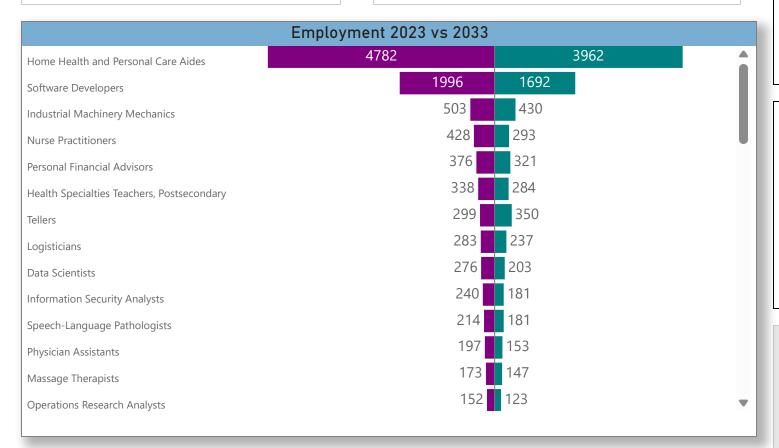
About This Report

This project explores how artificial intelligence is influencing trends in employment, occupations, and wages—whether it's replacing workers or transforming their roles. It uses data from BLS, O*NET, and the U.S. Census to analyze growth, decline, and shifting skill demands across the job market.

Summary

Trends

Skille



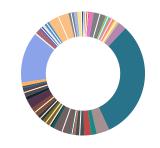
Select all

Declining

Growing

Declining Jobs 2023

by occupation- % share



Growing Jobs 2033

by occupation - % share



Data Sources

BLS:

https://www.bls.gov

U.S. Census NAICS:

https://www.census.gov/naics

O*NET:

https://www.onetcenter.org

Select all

Business and Financ...

Computer and Mathe...

Constructi... and Extrac...

Educational Instruction...

Healthcare Practitione...

Healthcare Support

Installation, Maintenan...

Life, Physical, a...

Office and Administra...

Production

Sales and Related



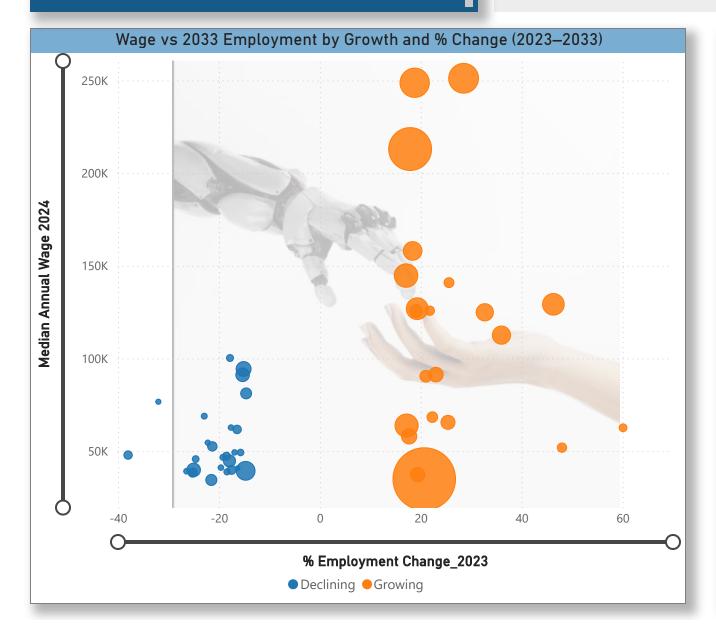
Employment Trend Analysis 2023 - 2033 Trends

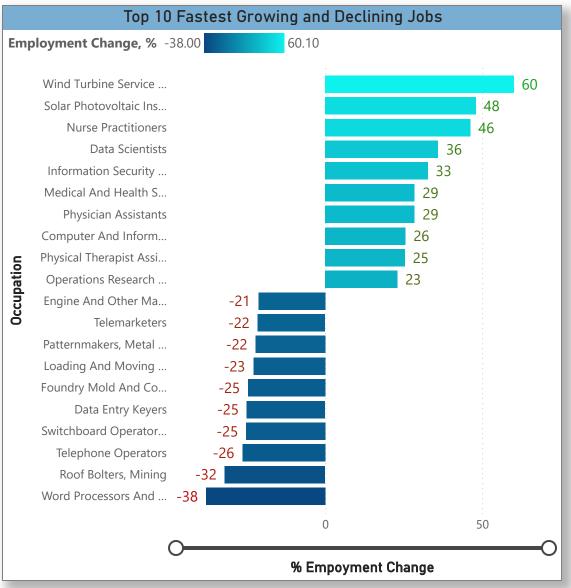
Occupation

All



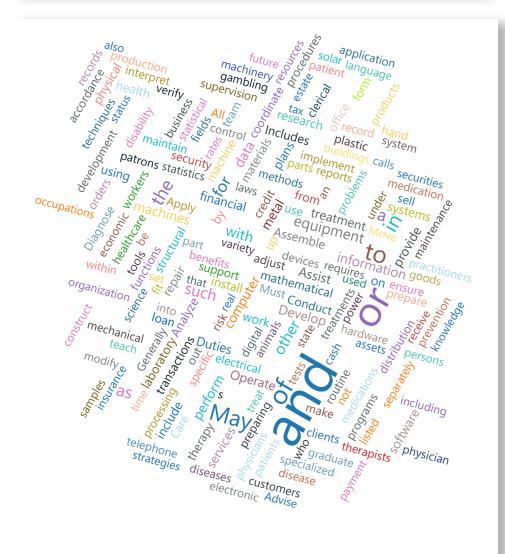


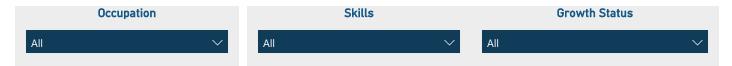






Employment Trend Analysis 2023 - 2033 Skills





Occupation

Occupation	Description
Actuaries	All computer occupations not listed separately.
Actuaries	Analyze statistical data, such as mortality, accident, sickness, disability, and retirem tables to forecast risk and liability for payment of future benefits. May ascertain in reserves necessary to ensure payment of future benefits.
Aircraft Structure, Surfaces, Rigging, And Systems Assemblers	Assemble, fit, fasten, and install parts of airplanes, space vehicles, or missiles, such stabilizers, landing gear, rigging and control equipment, or heating and ventilating
Aircraft Structure, Surfaces, Rigging, And Systems Assemblers	Directly supervise and coordinate the activities of production and operating worker workers, machine setters and operators, assemblers, fabricators, and plant and sys leaders.
Camera And Photographic Equipment Repairers	Repair and adjust cameras and photographic equipment, including commercial vicequipment.
Computer And Information Research Scientists	Conduct research into fundamental computer and information science as theorists solutions to problems in the field of computer hardware and software.
Computer And Information Research Scientists	Plan, implement, upgrade, or monitor security measures for the protection of com Assess system vulnerabilities for security risks and propose and implement risk mirappropriate security controls are in place that will safeguard digital files and vital eto computer security breaches and viruses.
Cutters And Trimmers, Hand	Use hand tools or hand-held power tools to cut and trim a variety of manufacture glass, or rubber.
Data Entry Keyers	Operate data entry device, such as keyboard or photo composing perforator. Duti preparing materials for printing.
Data Scientists	Develop and implement a set of techniques or analytics applications to transform using data-oriented programming languages and visualization software. Apply dalanguage processing, and machine learning to extract and analyze information fro datasets. Visualize, interpret, and report data findings. May create dynamic data re
Data Scientists	Develop or apply mathematical or statistical theory and methods to collect, organ numerical data to provide usable information. May specialize in fields such as bios business statistics, or economic statistics. Includes mathematical and survey statist

Visual Wage vs 2033 Employment by Growth and % Change (2023–2033):

From table employment_trends_df: employment_2023, employment_2033, employment_change, median_annual_wage.

From table occupation_details_df:

2023_national_matrix_employment_title, growth_status.

Visual Employment 2023 vs 2033):

From table employment_trends_df: employment_2023, employment_2033. From table soc_codes_df: occupation_title.