

Employment Trend Analysis 2023 - 2033

Is AI taking our jobs or transforming them?

Summary

Trends

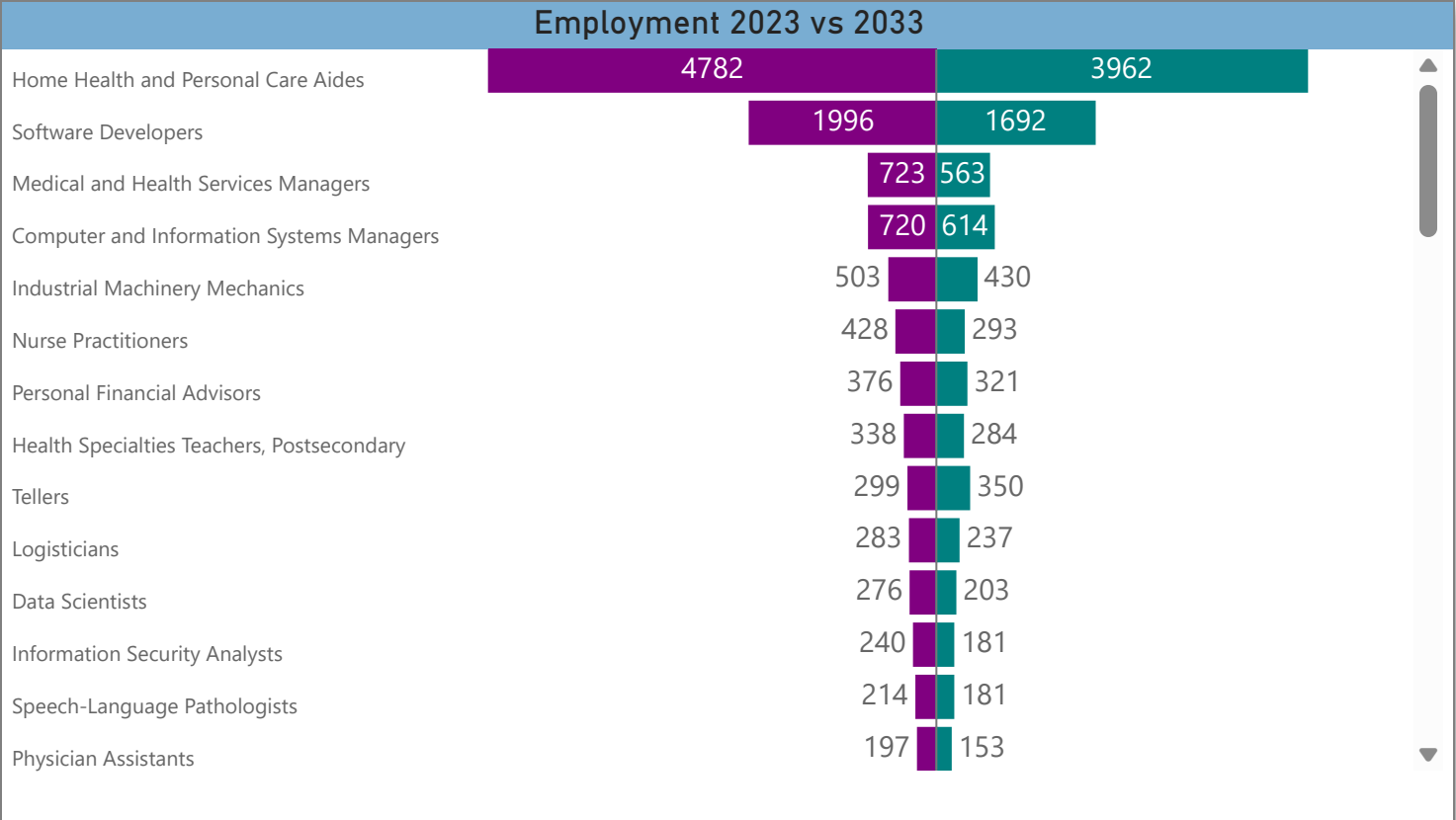
Skills

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



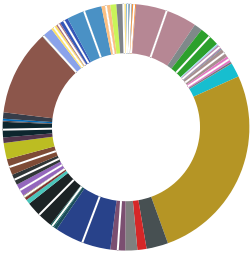
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Declining

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 Financial O...
- Computer and Mathemati...
- Constructi... and Extraction
- Educational Instruction and Library
- Healthcare Practitioners and Techni...
- Healthcare Support
- Installation, Maintenanc... and Repair
- Life, Physical, and Social ...
- Office and Administra... Support
- Production
- Sales and Related



Employment Trend Analysis 2023 - 2033

Trends

Occupation

All

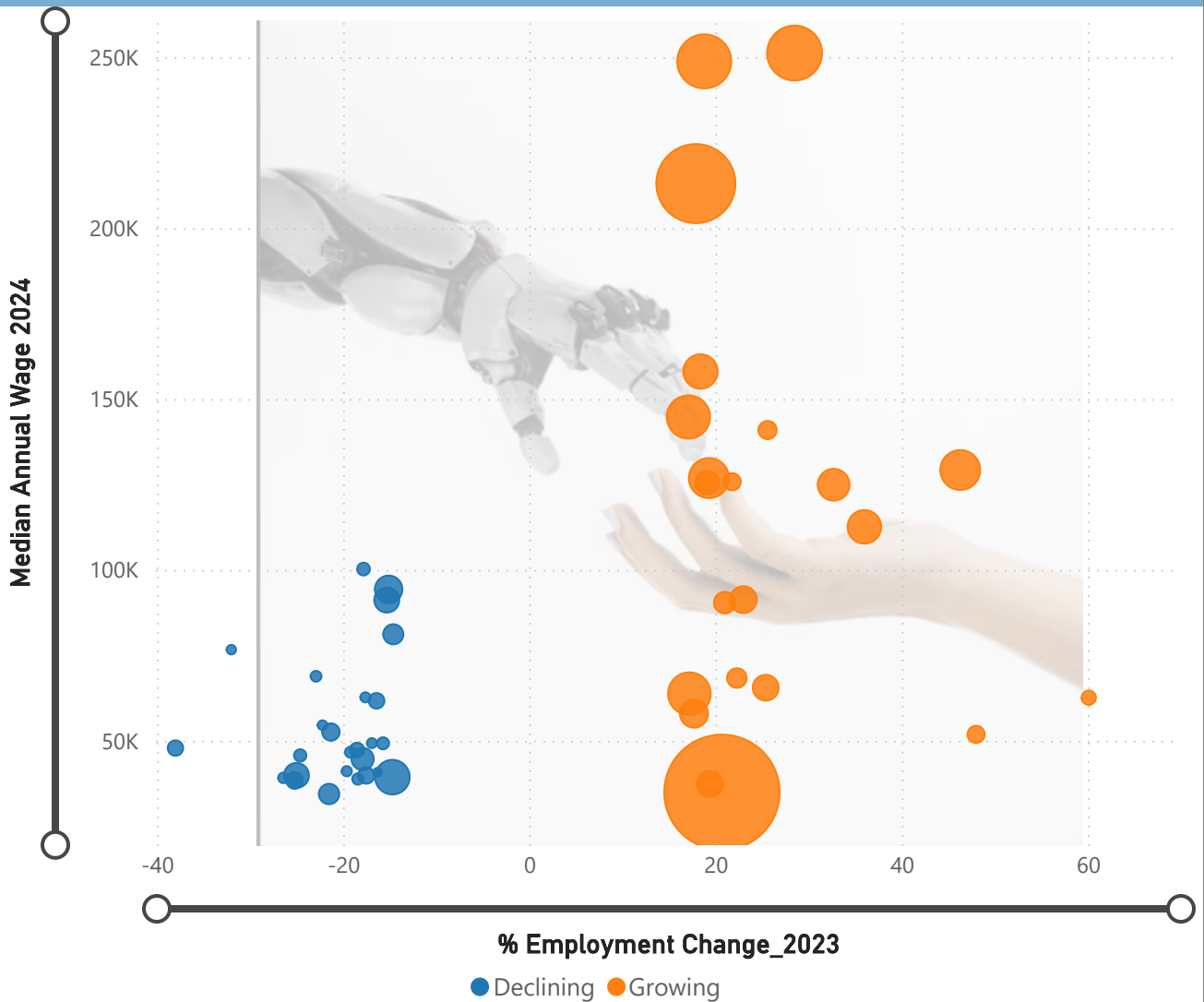
Skills

All

Growth Status

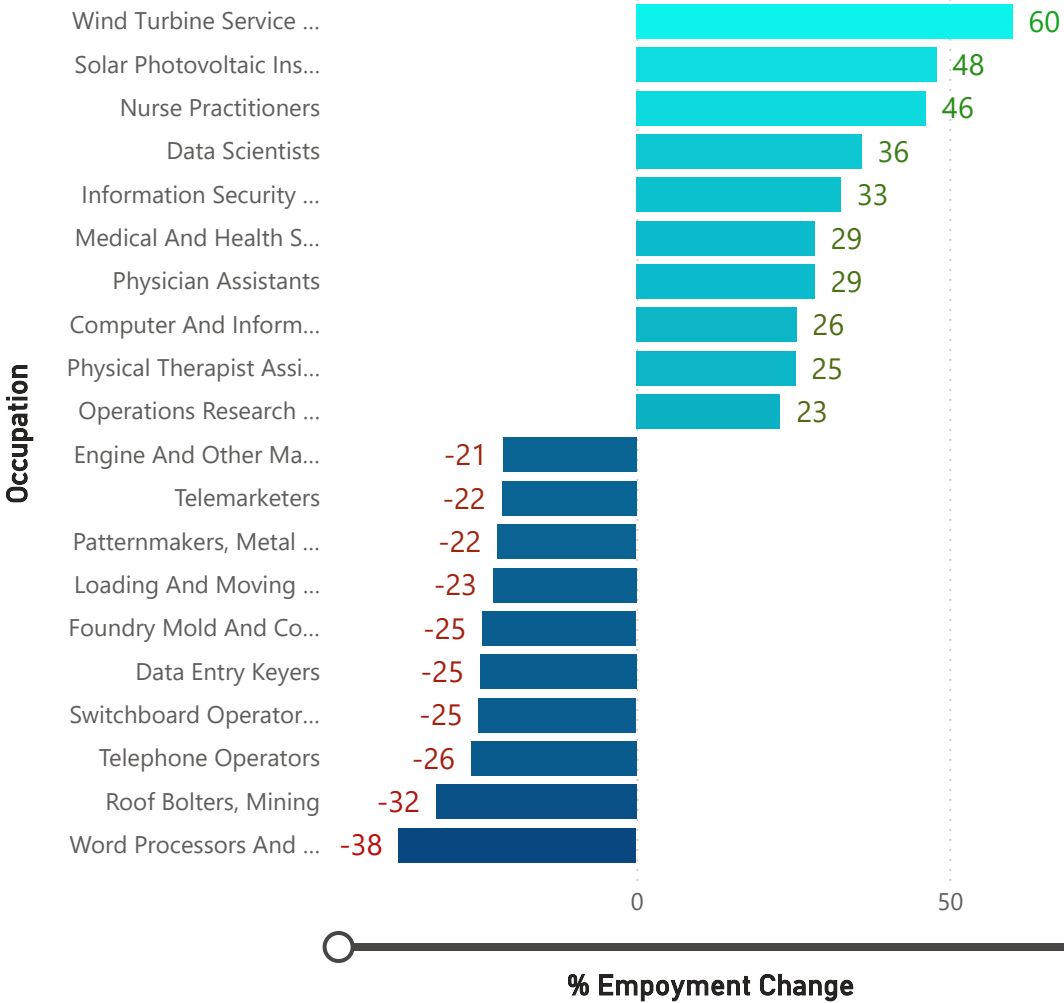
All

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



Top 10 Fastest Growing and Declining Jobs

Employment Change, % -38.00 60.10





Employment Trend Analysis 2023 - 2033

Skills



Occupation

All

Skills

All

Growth Status

All

Occupation

Occupation	Description
Actuaries	All computer occupations not listed separately.
Actuaries	Analyze statistical data, such as mortality, accident, sickness, disability, and retirement 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 as 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 workers, machine setters and operators, assemblers, fabricators, and plant and systems leaders.
Camera And Photographic Equipment Repairers	Repair and adjust cameras and photographic equipment, including commercial video equipment.
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 computer systems. Assess system vulnerabilities for security risks and propose and implement risk mitigation. Ensure appropriate security controls are in place that will safeguard digital files and vital data to computer security breaches and viruses.
Cutters And Trimmers, Hand	Use hand tools or hand-held power tools to cut and trim a variety of manufactured materials, such as glass, or rubber.
Data Entry Keyers	Operate data entry device, such as keyboard or photo composing perforator. Duties include preparing materials for printing.
Data Scientists	Develop and implement a set of techniques or analytics applications to transform raw data into useful information using data-oriented programming languages and visualization software. Apply data mining, language processing, and machine learning to extract and analyze information from large datasets. Visualize, interpret, and report data findings. May create dynamic data reports.
Data Scientists	Develop or apply mathematical or statistical theory and methods to collect, organize, and analyze numerical data to provide usable information. May specialize in fields such as biological, business statistics, or economic statistics. Includes mathematical and survey statisticians.

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.