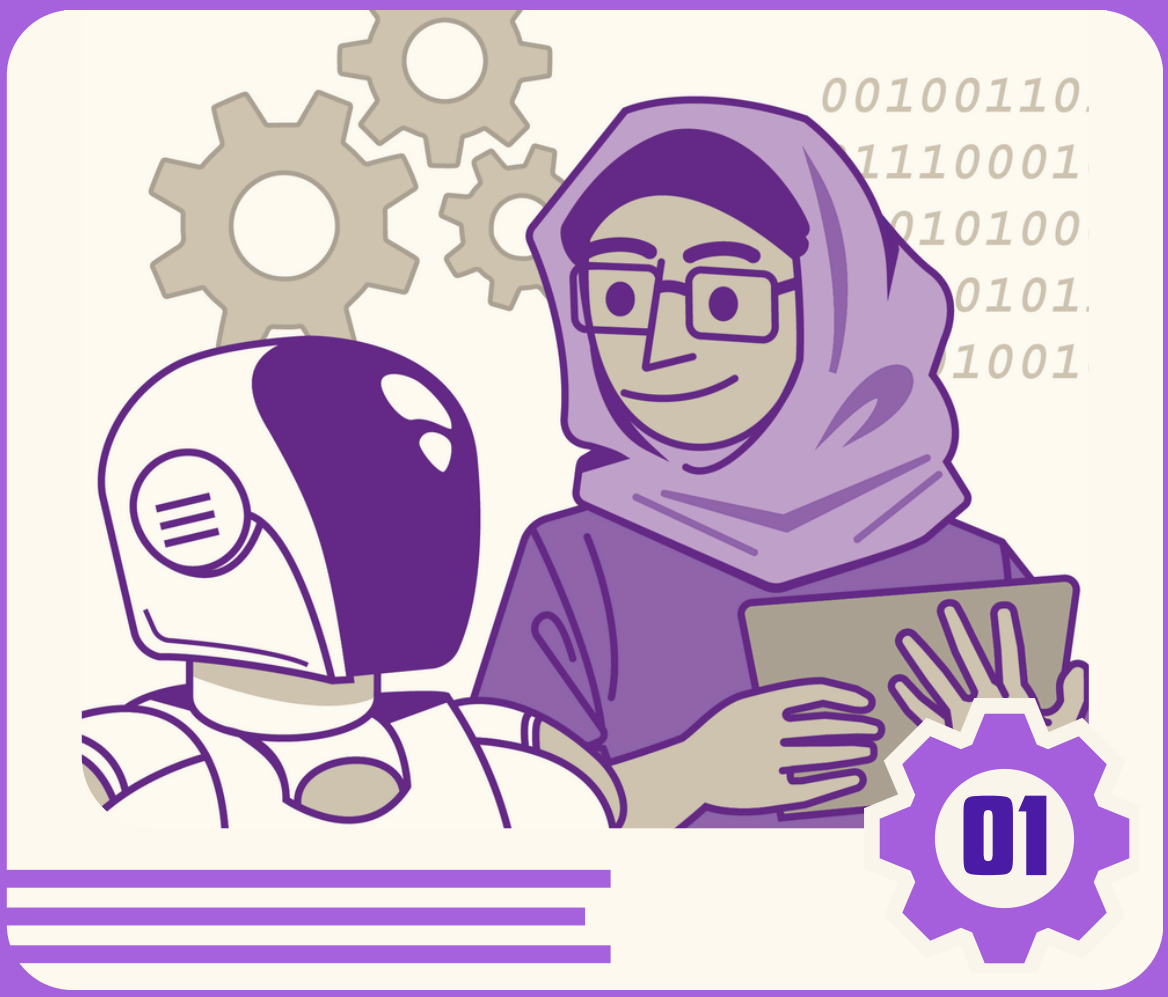
ROBOTICS ENGINEER



Design and development of robotic systems

Examples

Delivery robots
Warehouse robots
Self-driving vehicles

Degree Pathways

Mechanical Engineering
Electrical Engineering
Computer Engineering
Computer Science or Robotics

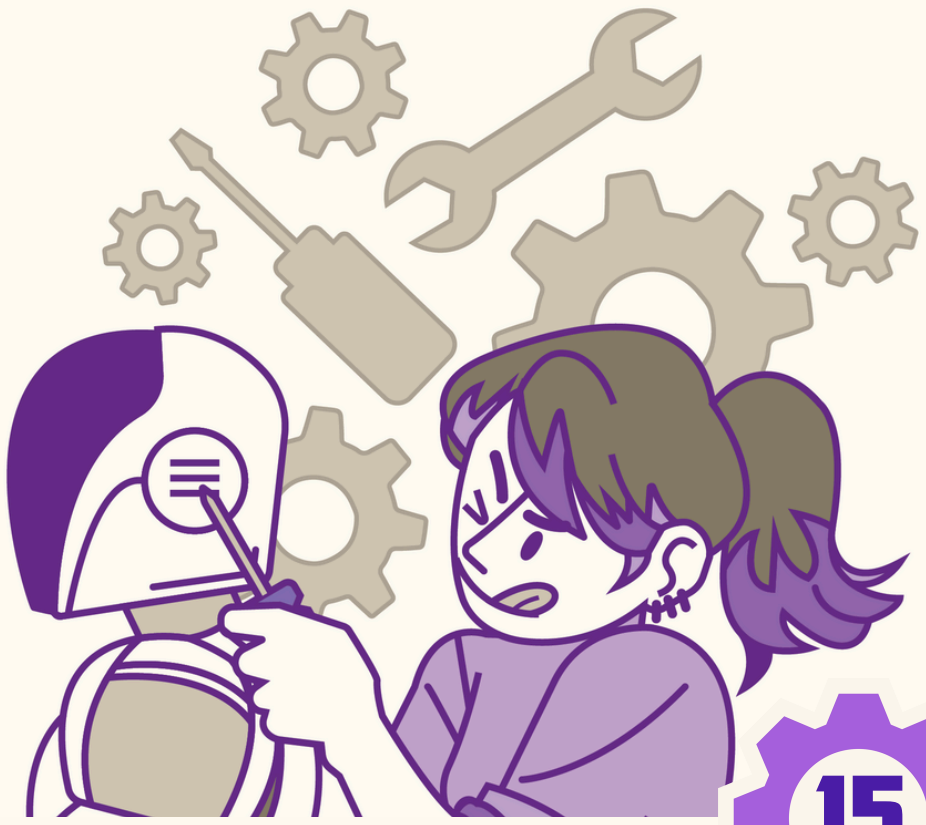
Technical Skills

Mechanical Design
Circuit Design
Robotics Software Systems
3D Printing

Median Salary

$85,000 - $120,000

ROBOTICS TECHNICIAN



15

Configure, install, and maintain robotic systems

Examples

Configure and install delivery robots in hospitals and hotels
Maintain a fleet of warehouse robots or self-driving cars

Degree Pathways

High School or Equivalent Diploma
Certification or Associate degree in Robotics, Electronics, Mechanical Engineering

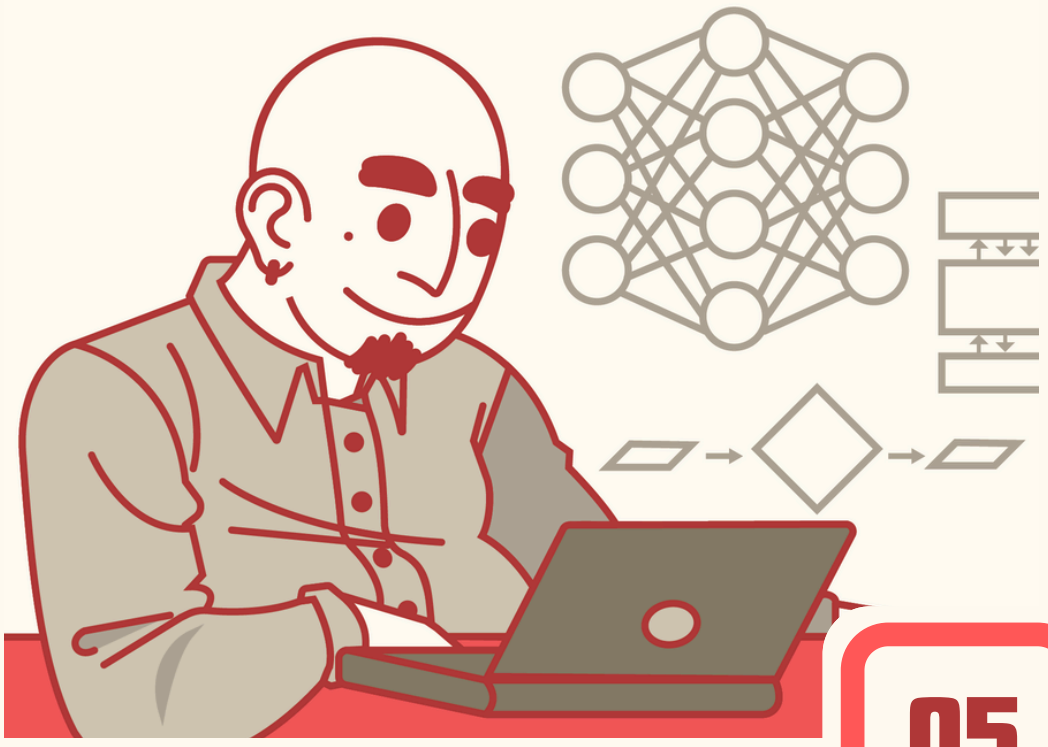
Technical Skills

Electrical, Mechanical, and Hydraulic Systems
Robotic Sensor Systems
Software Systems
Technical Manuals and Schematics

Median Salary

$46,000 - $75,000

MACHINE LEARNING ENGINEER



05

Designs and builds AI systems that use large datasets to make predictions

Examples

Movie, music, or product recommendation systems

Training generative AI models (e.g., ChatGPT, Stable Diffusion)

Degree Pathways

Computer Science

Machine Learning

Technical Skills

Machine Learning Algorithms

Software Engineering

Deep Neural Networks

Model Evaluation

Median Salary

$145,000 - $160,000

AI RESEARCHER

07

Develops new algorithms and architectures for artificial intelligence

Examples

Developing new machine learning algorithms to train large language models such as ChatGPT

Degree Pathways

Computer Science
Machine Learning
Mathematics
Statistics

Technical Skills

Large Language Models
Deep Learning
Algorithm Design
Knowledge Representation

Median Salary

$110,000 - $190,000

AI ARCHITECT

08

Plans and designs large AI-powered software systems

Examples

Design an AI system that helps a company better understand and serve its customers

Degree Pathways

Computer Science
Information Systems & Technology
Data Science
Machine Learning

Technical Skills

System Architecture
Data Management
Project Management
Programming
Machine Learning
Cloud Computing

Median Salary

$107,000 - $130,000

COMPUER VISION ENGINEER

10

Develops algorithms and applications that allow computers to recognize information in images or videos

Examples

Face recognition in smart phones
Visual search (e.g., Google Lens, Pinterest)
Scene understanding in self-driving cars

Degree Pathways

Computer Science
Computer Engineering
Robotics

Technical Skills

Computer Vision
Image Processing
Machine Learning
Artificial Intelligence
Programming
Computer Graphics

Median Salary

$165,000 - $170,000

DATA ARCHITECT

Designs and implements an organization's strategies for data storage and access

Examples

Designing an Internet retailer's product and customer databases
Implementation of storage and security policies for public records databases

Degree Pathways

Information Systems & Technology
Computer Science
Data Science

Technical Skills

Software Development
Machine Learning
Databases
Cloud Computing
System Architecture
Data Visualization
Cybersecurity

Median Salary

$143,000 - $150,000

DATA ENGINEER

02

Creates and manages large datasets to support machine learning and data science projects

Examples

Collecting and organizing disease outbreak data from multiple health agencies

Degree Pathways

Information Systems & Technology
Computer Science

Technical Skills

Data Management
Data Science
Machine Learning
Programming

Median Salary

$151,000 - $160,000

DATA SCIENTIST

04

Collects and analyzes datasets to detect patterns that help organizations make better decisions

Examples

Discovering new types of customers based on purchase history

Modeling changes in animal populations due to climate change

Degree Pathways

Computer Science

Statistics

Data Science

Technical Skills

Data Management

Data Visualization

Data Analysis

Machine Learning

Median Salary

$115,000 - $130,000

BUSINESS ANALYST

03

Solves business problems using statistical and machine learning tools

Examples

Performing financial analyses to predict revenue and expenses

Forecasting seasonal demand for products

Degree Pathways

Business Administration

Finance

Data Science

Computer Science

Technical Skills

Statistical Analysis

Financial Forecasting

Data Visualization

Machine Learning

Median Salary

$68,000 - $120,000

PRODUCT MANAGER

06

Manages the planning, development, and launch of products and services that use AI

Examples

Works with a team to introduce new AI features into email, social media, or graphic design tools

Degree Pathways

Business Administration
Marketing
Computer Science

Technical Skills

- Business Strategy
- Market Research
- Data Analytics
- Behavior Sciences
- Design Thinking
- Problem-solving
- Team Management

Median Salary

$131,000 - $150,000

USER EXPERIENCE (UX) DESIGNER

11

Works with users and software developers to create products that are easy to understand and use

Examples

Design the passenger experience in self-driving cars (e.g., in-car displays, audio notifications, and mobile app)

Design interfaces for mobile apps, websites, and digital products

Degree Pathways

Computer Science

Web and Graphic Design

Human Factors Engineering

Psychology

Technical Skills

Interviewing

Field Research

Data Analysis

Behavioral Analysis

Interface Design

Prototyping

User Testing

Median Salary

$143,000 - $150,000

SOFTWARE ENGINEER

24

Design and program apps and software systems.

Examples

Mobile Apps

Games

Cybersecurity

Degree Pathways

Computer Science

Software Engineering

Computer Engineering

Technical Skills

Programming

Testing & debugging

Software Development

Design Thinking

Problem-solving

algorithm development

Median Salary

$65,000 - $205,000

CONVERSATIONAL AI SPECIALIAST

Develops Natural Language Processing functionality for chatbots and intelligent assistants

Examples

Develop customer service chatbots for websites

Develop intelligent assistants such as Siri, Alexa, or Google Home

Degree Pathways

Computer Science

Artificial Intelligence

Cognitive Science

Linguistics

Technical Skills

Linguistic Analysis

Dialogue Management

Large Language Models

Software Engineering

Median Salary

$63,000 - $85,000

NATURAL LANGUAGE PROCESSING (NLP) ENGINEER

Develops applications that can understand and generate human language

Examples

Develops algorithms that allow search engines to understand & answer questions

Develops text summarization and language translation apps

Degree Pathways

Computer Science

Machine Learning

Cognitive Science

Linguistics

Technical Skills

Linguistic Analysis

Machine Learning

Large Language Models

Software Engineering

Median Salary

$108,000 - $120,000

AI CAREER CARDS

Explore Your Future In AI

AI4GA

Artificial Intelligence
For Georgia

ABOUT THIS DECK

Created by
University of Florida Students:
Katja Karoleski, Joanna Mijares, and
Arwen Dowers

CHECK OUT THE FULL SET

https://ai4ga.org/careers

CONTENT DEVELOPED BY

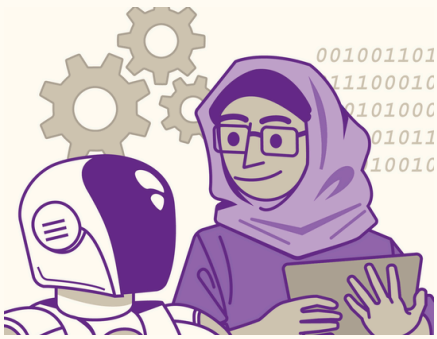
Christina Gardner-McCune
University of Florida
David Touretzky
Carnegie Mellon

THANK YOU

This deck was funded by
NSF DRL-2049029 and
DRL-2048502

AI Career Cards
Core AI

CORE AI professionals create AI functionality for AI products, services, and tools we use in our personal and professional lives.



AI Career Cards
Robotics

ROBOTICS professionals create and maintain robotic systems that interact with people and automate work across multiple areas of society.

AI Career Cards
Data

DATA professionals collect, organize, store, and process large data sets that are used to train AI models and gain insights.

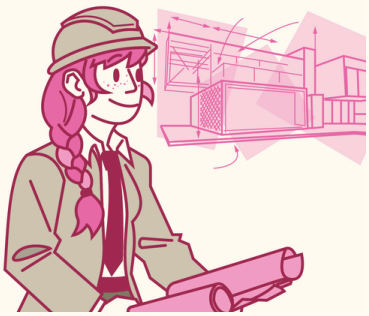
AI Career Cards

Language

AI LANGUAGE professionals create algorithms and intelligent agents that enable computers to understand human language, talk, and collaborate with us.

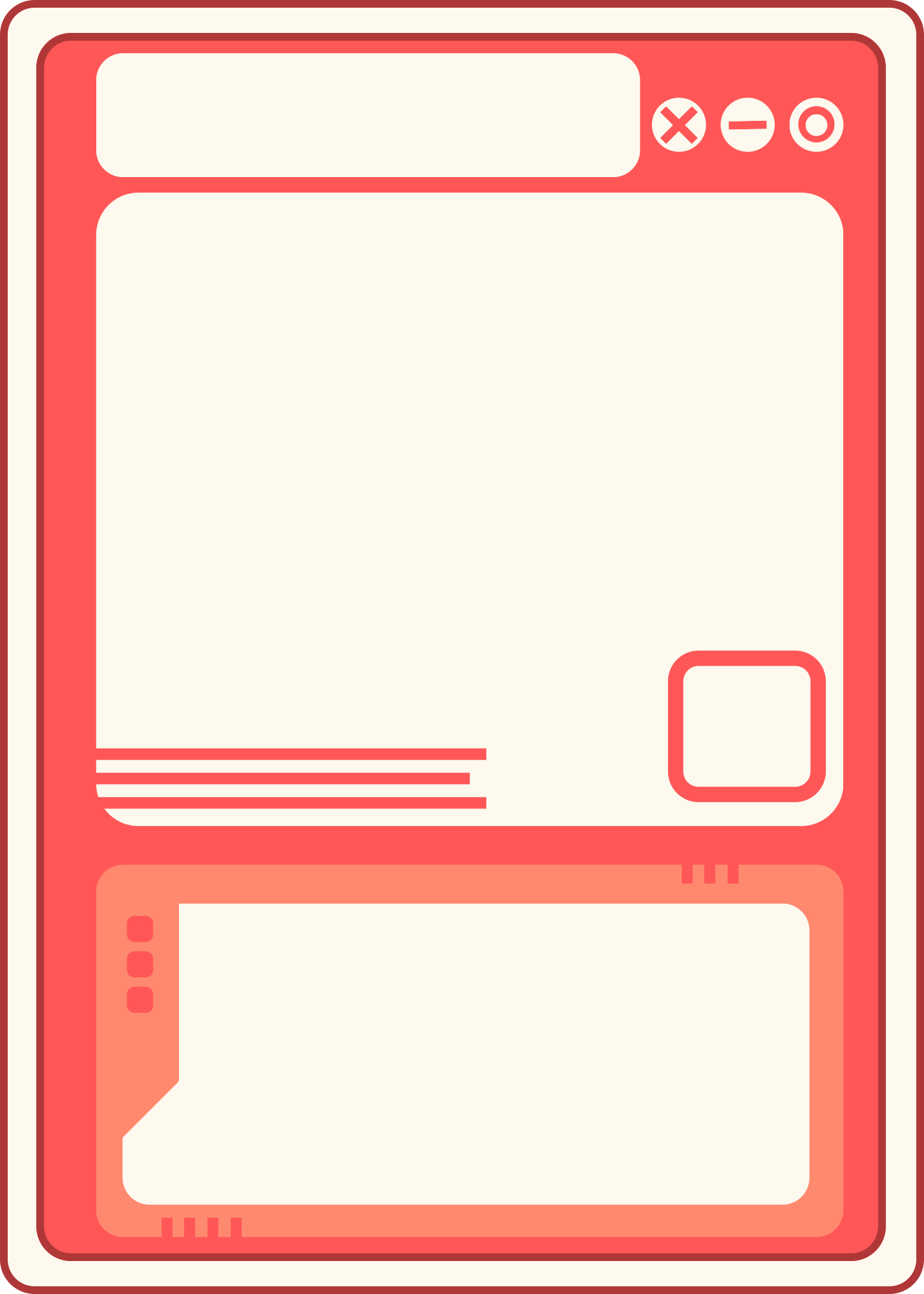
AI Career Cards
Product Design

AI PRODUCT DESIGN professionals design, program, and launch innovative AI products through understanding the needs of users and goals of businesses.



AI Career Cards
AI-Enabled

AI-ENABLED professionals use AI to enhance their capabilities and work in their field of expertise.

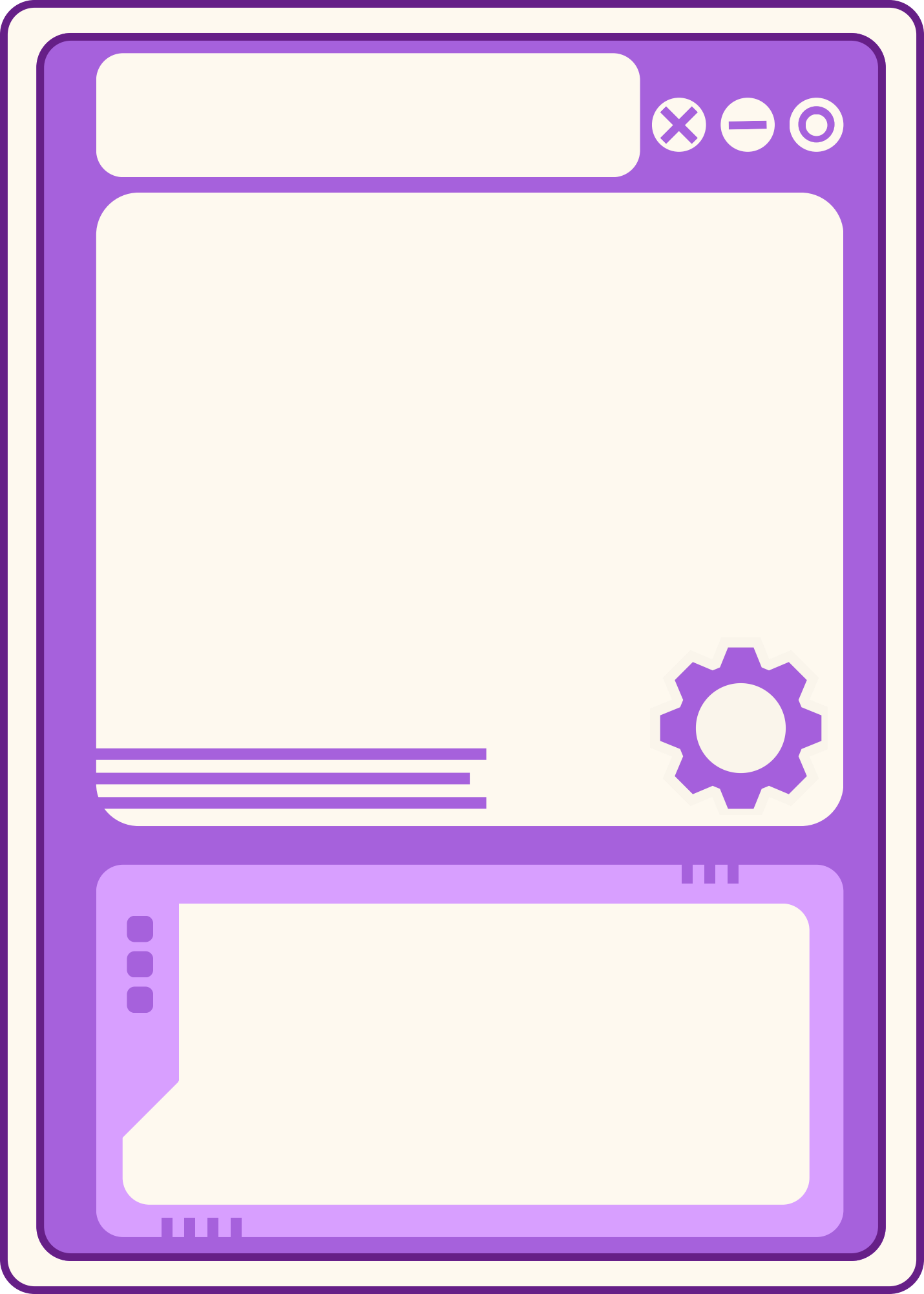


Examples

Degree Pathways

Technical Skills

Median Salary

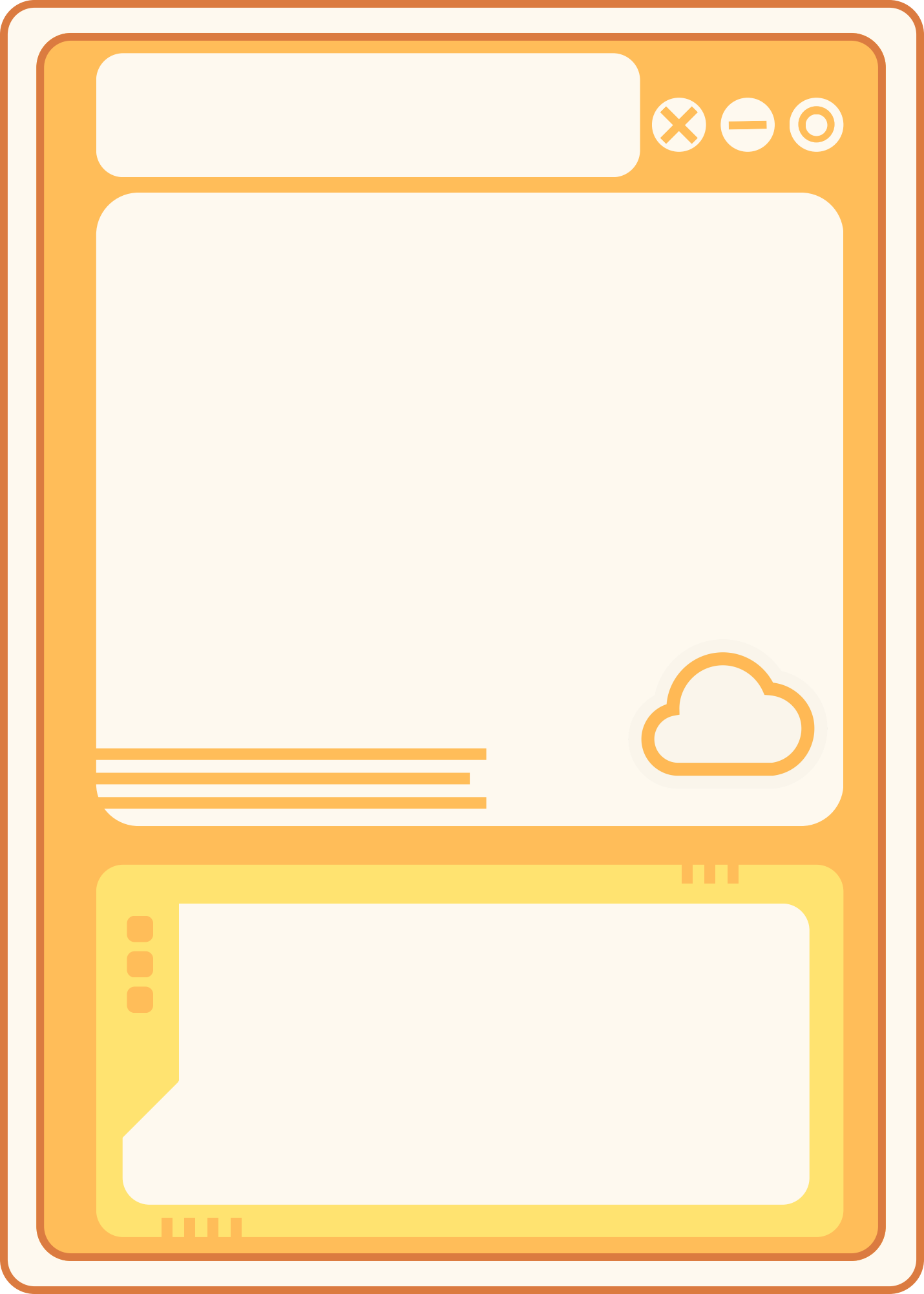


Examples

Degree Pathways

Technical Skills

Median Salary

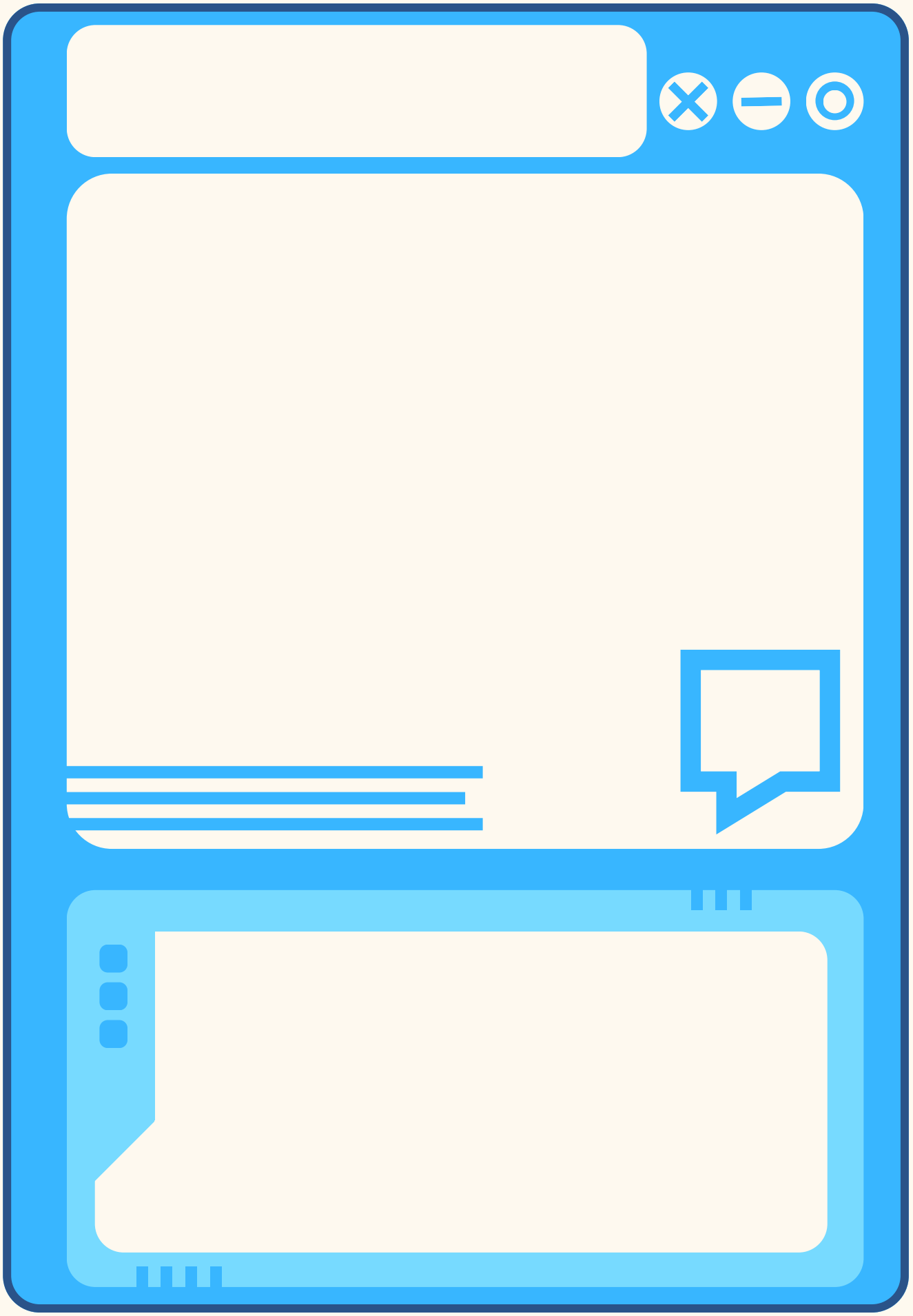


Examples

Degree Pathways

Technical Skills

Median Salary

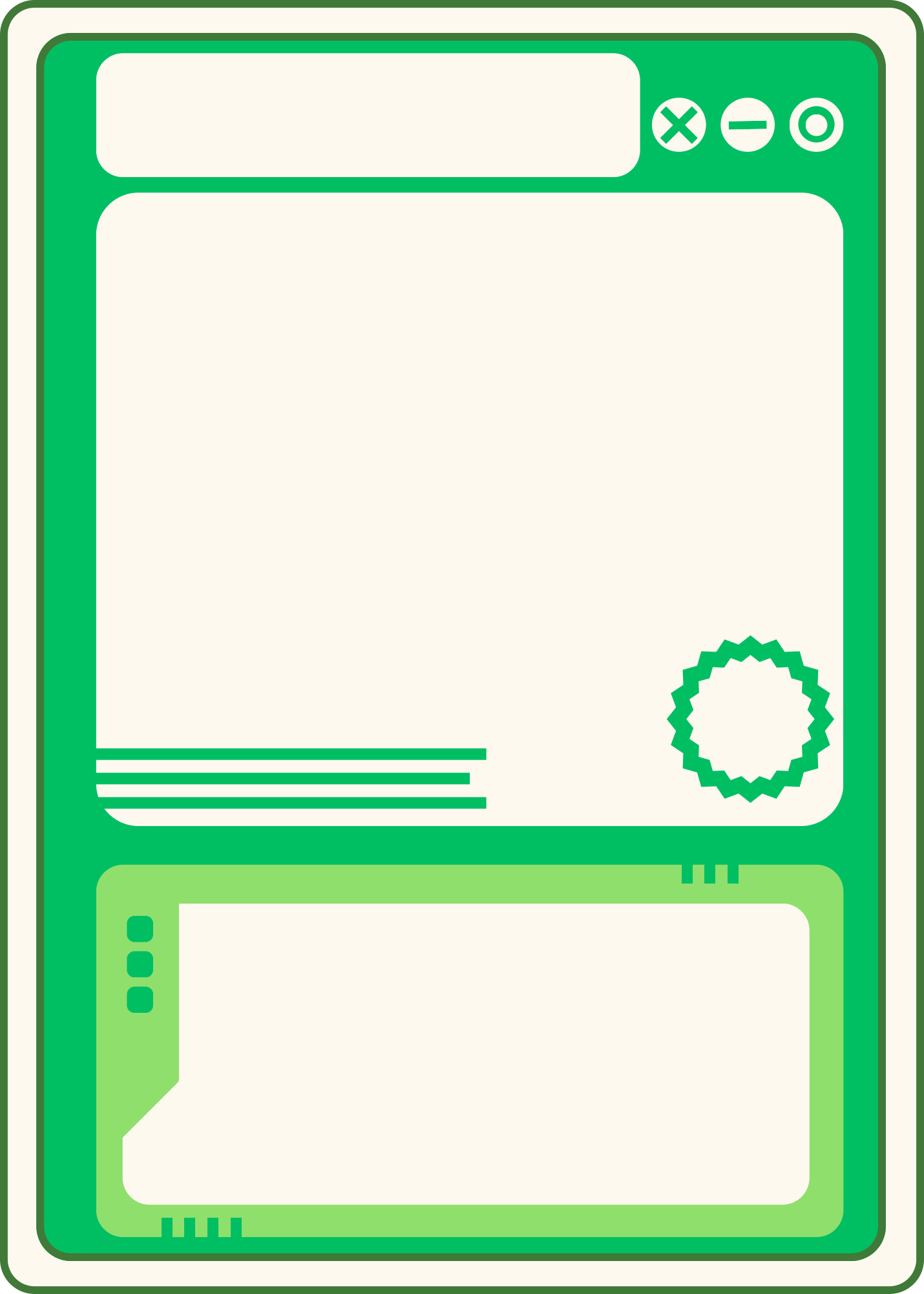


Examples

Degree Pathways

Technical Skills

Median Salary

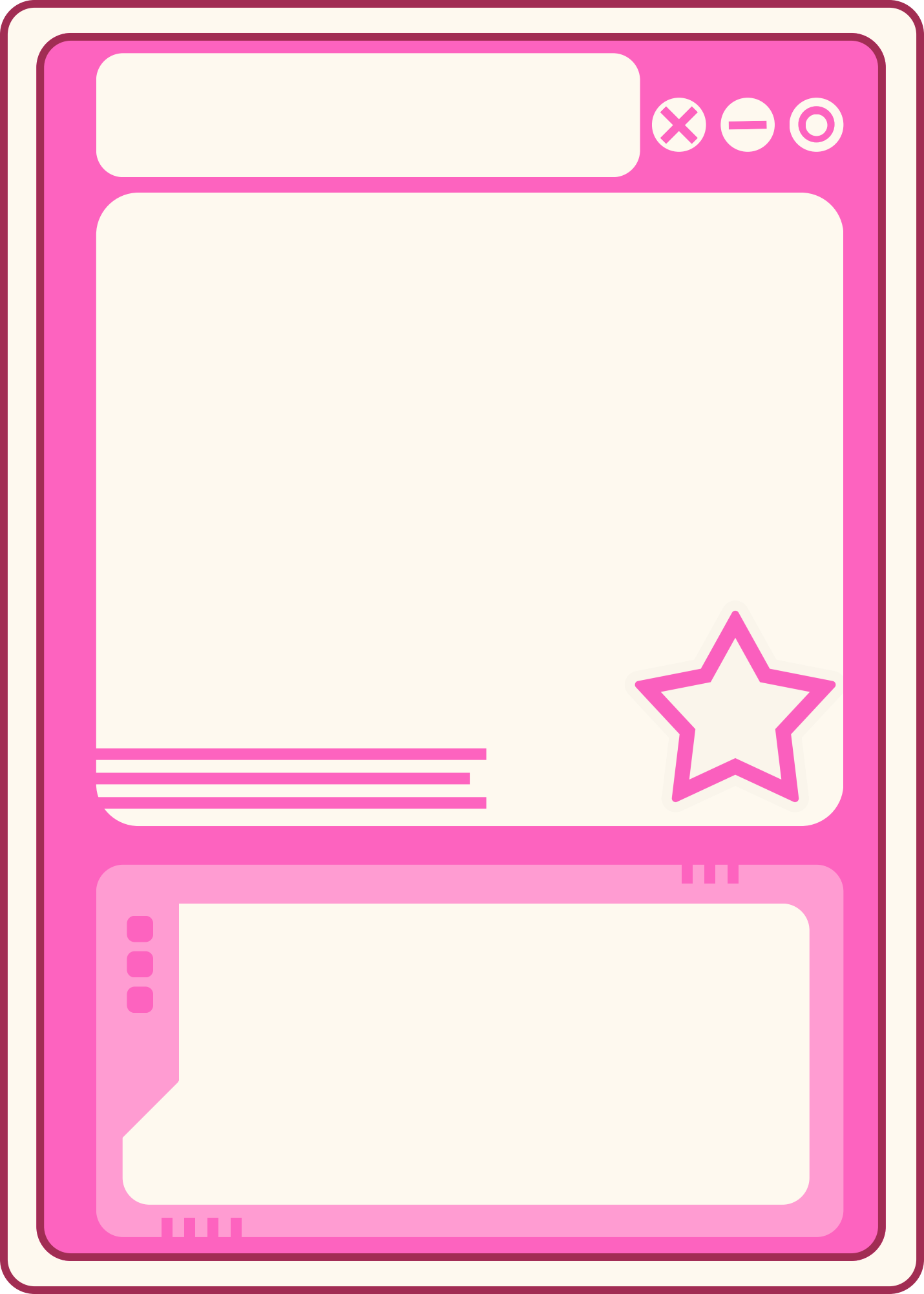


Examples

Degree Pathways

Technical Skills

Median Salary



Examples

Degree Pathways

Technical Skills

Median Salary