

# Workstations powered by Intel can play a vital role in CPU-intensive AI developer tasks

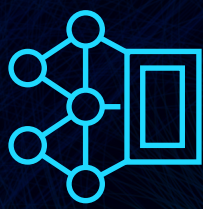
For certain AI tasks, developers can benefit from Intel processors that leverage only CPU cores. For your CPU-intensive AI tasks, consider workstations powered by Intel.

We executed **three AI development workflows** using only the CPU cores in tower and mobile workstations from three different vendors.



## Characterizing documents

then adding them to a database and indexing them



## Analyzing a portrait

by asking a local LLM to describe it



## Standardizing images

and creating new images suitable for testing or training

## What we learned



Tower and mobile workstations completed these AI workflows in **acceptable times**.



In one workflow, using 16-bit floating point instructions **reduced time and memory usage**.



These workstations can be **appropriate, cost-effective choices** for the kinds of activities we tested.

## Test systems

### Tower workstations



#### Dell™ Precision™ 7960 tower workstation

with the Intel® Xeon® w7-3455 processor, 128 GB of RAM, and a 1TB PCIe NVMe® solid-state drive (SSD)

#### HP Z8 Fury G5 tower workstation

with the Intel Xeon w7-3455 processor, 128 GB of RAM, and a 1TB PCIe NVMe SSD

#### Lenovo® ThinkStation® P7 tower workstation

with the Intel Xeon w9-3495X processor, 128 GB of RAM, and a 1TB PCIe NVMe SSD

### Mobile workstations



#### Dell Precision 7780 mobile workstation

with the 13<sup>th</sup> Gen Intel Core™ i7-13850HX processor, 64 GB of RAM, and a 1TB PCIe NVMe SSD

#### HP ZBook Fury 16 G10 mobile workstation

with the 13<sup>th</sup> Gen Intel Core i7-13850HX processor, 32 GB of RAM, and a 512GB PCIe NVMe SSD

#### Lenovo ThinkPad® P16 G2 mobile workstation

with the 13<sup>th</sup> Gen Intel Core i9-13980HX processor, 64 GB of RAM, and a 1TB PCIe NVMe SSD

Learn more at <https://facts.pt/8xoaOpQ>