# AI Applications with PEAS Description

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| S.No | Application | Performance Measure (P) | Environment (E) | Actuators (A) | Sensors (S) |
| 1 | Virtual AI teacher | Student engagement, accuracy of explanation | Virtual classroom | Voice/text output | Student questions, voice/text input |
| 2 | Robotic surgery assistant | Precision, recovery time | Operating room | Robotic arms | Imaging tools, sensor feedback |
| 3 | AI news summarizer | Summary quality, relevance, brevity | News articles, web services | Text generator | News content, language models |
| 4 | Medical Image Analysis | Detection accuracy (e.g., tumors, fractures) | Radiology labs | Highlighted reports, image annotations | MRI, CT, X-ray scans |
| 5 | Game AI opponent | Realism, engagement level | Video games | Character actions | Player behavior, game state |
| 6 | Crop disease detector | Early detection, accuracy | Farmland | Warning system | Leaf images, camera, soil data |
| 7 | Quality Inspection System | Defect detection accuracy | Assembly line | Sorting, marking | Cameras, defect scanners |
| 8 | Automated document verifier | Identity match accuracy, speed | Public service offices | Approval/rejection action | OCR, image scanner |
| 9 | AI for wildlife monitoring | Poaching alert accuracy, animal tracking | Forests, reserves | Alert system | Camera traps, motion sensors, drones |
| 10 | Part-picking robot | Percentage of parts in correct bins | Conveyor belt with parts/bins | Jointed arms and hands | Camera, joint angle sensors |