Figure 3: Model Interpretability via SHAP Analysis
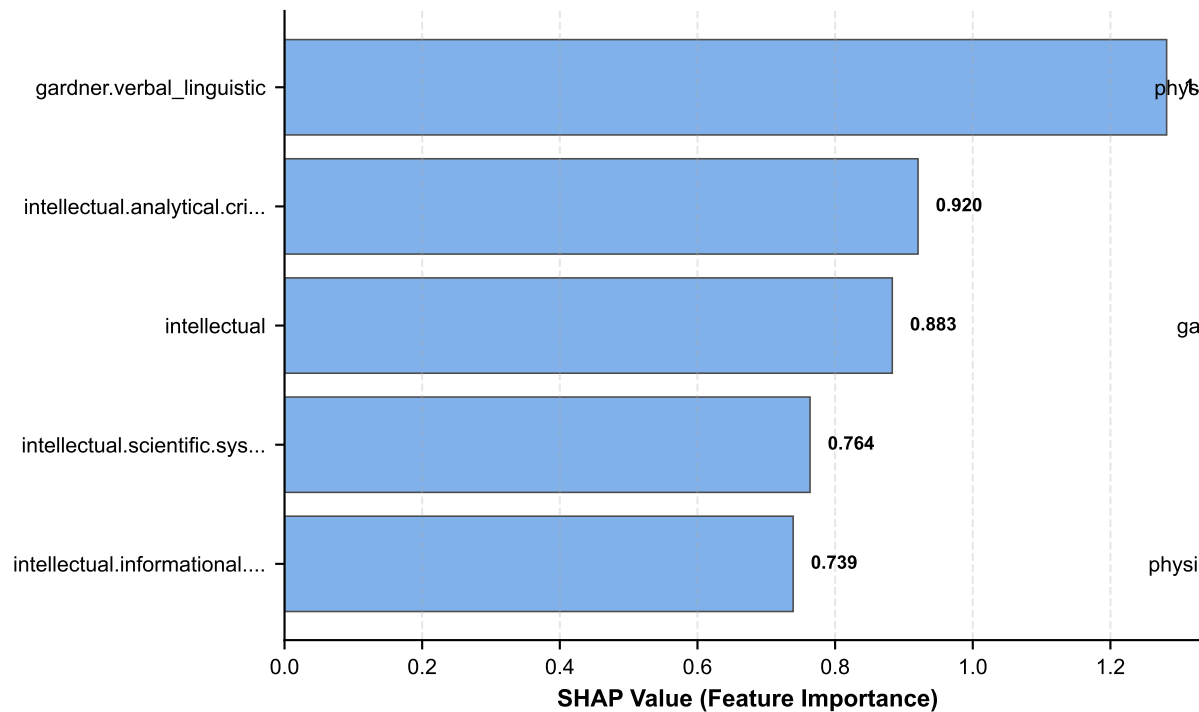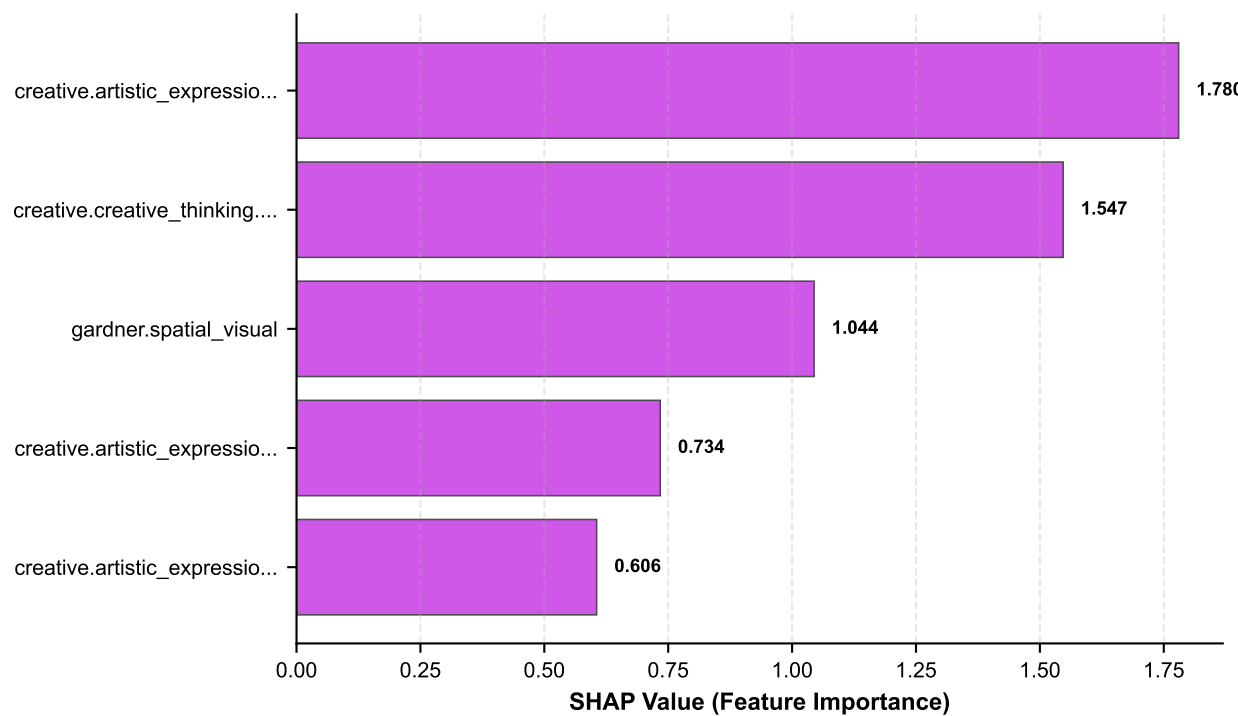
A. Academic Talent Features
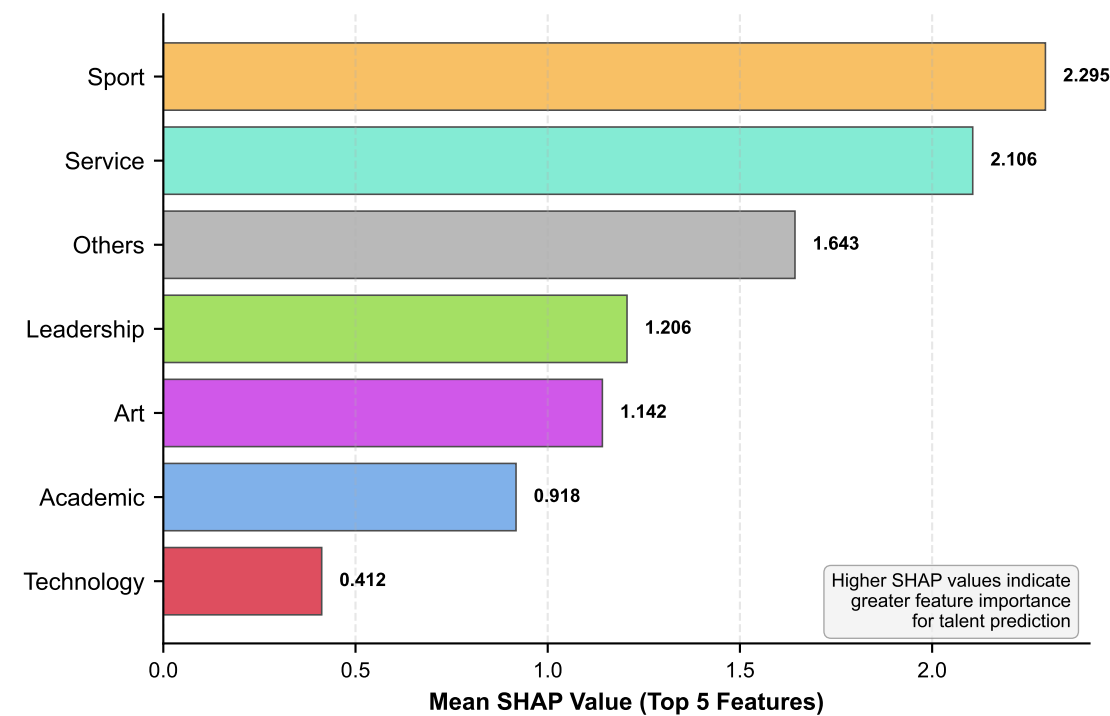
- gardner.verbal_linguistic — 1.282
- intellectual.analytical.cri... — 0.920
- intellectual — 0.883
- intellectual.scientific.sys... — 0.764
- intellectual.informational.... — 0.739

SHAP Value (Feature Importance)

B. Sport Talent Features

- physical.manual_skills.fine... — 3.936
- atype_text — 3.516
- gardner.bodily_kinesthetic — 2.023
- physical — 1.562
- physical.manual_skills.dext... — 0.436

SHAP Value (Feature Importance)
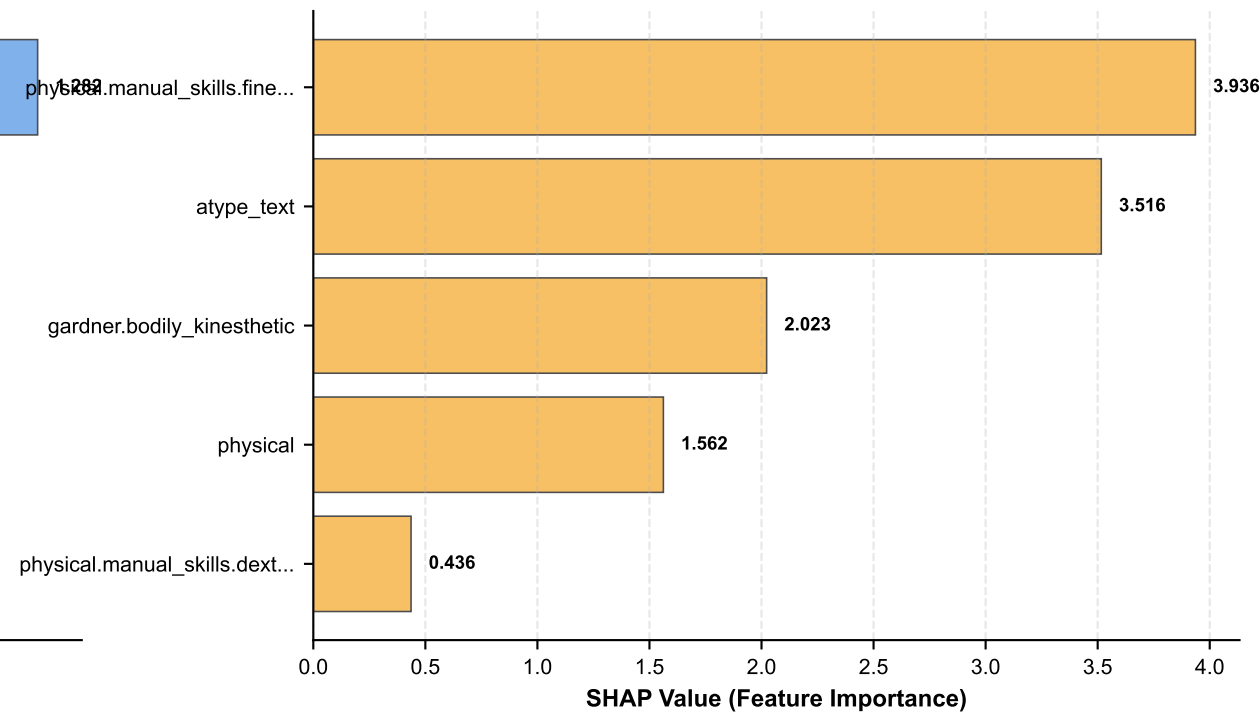
C. Artistic Talent Features

- creative.artistic_expressio... — 1.780
- creative.creative_thinking.... — 1.547
- gardner.spatial_visual — 1.044
- creative.artistic_expressio... — 0.734
- creative.artistic_expressio... — 0.606

SHAP Value (Feature Importance)

D. Cross-Domain Feature Importance

- Sport — 2.295
- Service — 2.106
- Others — 1.643
- Leadership — 1.206
- Art — 1.142
- Academic — 0.918
- Technology — 0.412

Mean SHAP Value (Top 5 Features)

Higher SHAP values indicate greater feature importance for talent prediction