

## Supplementary Material

### 1 Ludography

Below is a complete list of games used in the analysis for reexamining core tasks, and identifying their supporting assistance techniques. These are referenced in the paper using the items numbers below.

- L1. 343 Industries, 2015, *Halo 5*, Microsoft Studio, USA.
- L2. Alawar Entertainment, 2010, *Grace's Quest: To Catch An Art Thief*, Alawar Entertainment, Russia.
- L3. Amusement Vision, 2001, *Super Monkey Ball*, Sega, Japan.
- L4. Awem Games, 2010, *Golden Trails: The New Western Rush*, Awm Games, Belarus.
- L5. Behaviour Interactive, 2016, *Dead by Daylight*, PC, Starbreeze Studios, Sweden.
- L6. Blizzard Entertainment, 1996, *Diablo*, PC, Blizzard Entertainment, USA.
- L7. Blizzard Entertainment, 2004, *World of Warcraft*, PC, Blizzard Entertainment, USA.
- L8. Blizzard Entertainment, 2012, *Diablo III*, Blizzard Entertainment, USA.
- L9. Blizzard Entertainment, 2016, *Overwatch*, PC, PS4, Xbox One, Blizzard Entertainment, USA.
- L10. Capcom, 1987, *Street Fighter*, Arcade, Capcom, Japan.
- L11. Capcom, 1996, *Resident Evil (aka Bio Hazard)*, PlayStation, Capcom, Japan.
- L12. Capcom, 2004, *Monster Hunter*, Capcom, Japan.
- L13. Capcom, 2018, *Monster Hunter: World*, PlayStation 4, Xbox One, Windows, Capcom, Japan.
- L14. CD Projekt Red, 2015, *The Witcher 3*, CD Projekt, Poland.
- L15. Creability, 2017, *OLDTV*, PC, Creability, UAE.
- L16. CyberConnect2, 2008, *Naruto: Ultimate Ninja*, Namco Bandai Games, USA.
- L17. Dontnod Entertainment, 2015, *Life Is Strange*, Square Enix, Japan.
- L18. EA DICE, 2013, *Battlefield 4*, Electronic Arts, USA.
- L19. Ensemble Studios, 1999, *Age of Empires II*, Microsoft, USA.
- L20. Epic Games, 2017, *Fortnite*, Epic Games, USA.
- L21. Game Freak, 2004, *Pokémon FireRed and LeafGreen*, The Pokémon Company, Nintendo, Japan.
- L22. Giants Software, 2012, *Farming Simulator*, Focus Home Interactive, France.
- L23. Harmonix, 2005, *Guitar Hero*, PlayStation 2, RedOctance, USA.
- L24. Harmonix, 2010, *Dance Central*, MTV Games and Microsoft Studios, USA.
- L25. Hidden Path Entertainment, 2012, *Counter-Strike Global Offensive*, PC, Consoles, Valve Corp., USA.
- L26. id Software, 1999, *Quake III Arena*, Activision, USA.
- L27. Infinity Ward, 2003, *Call of Duty*, Windows, Activision, USA.
- L28. Insomniac Games, 1998, *Spyro*, Sony Computer Entertainment, Japan.
- L29. King, 2012, *Candy Crush Saga*, King, United Kingdom.
- L30. Konami, 1987, *Metal Gear*, Konami, Japan.
- L31. Konami, 1998, *Dance Dance Revolution*, Arcade, Konami, Nintendo, Japan.
- L32. Level-5, 2007, *Professor Layton and the Curious Village*, Nintendo, Japan.
- L33. Magic Pockets, 2003, *Harry Potter: Quidditch World Cup*, EA Games, USA.

- L34. Monomi Park, 2017, *Slime Rancher*, Monomi Park, USA.
- L35. Nadeo, 2016, *TrackMania Turbo*, Ubisoft, France.
- L36. Namco, 1994, *Tekken*, Arcade, Bandai Namco Studios, Japan.
- L37. Nintendo EPD, 2017, *Legend of Zelda: Breath of the Wild*, Nintendo, Japan.
- L38. Nintendo, 1981, *Donkey Kong*, Arcade, Nintendo, Japan.
- L39. Nintendo, 1985, *Super Mario Bros.*, Famicom/NES, Nintendo, Japan.
- L40. Nintendo, 1986, *Legend of Zelda*, Famicom/NES, Nintendo, Japan.
- L41. Nintendo, 2001, *Animal Crossing*, Nintendo, Japan.
- L42. Orneon, 2011, *The Agency of Anomalies*, Big Fish Games, USA.
- L43. Psyonix, 2015, *Rocket League*, Psyonix, USA.
- L44. PUBG Corporation, 2017, *PlayerUnknown's Battlegrounds (PUBG)*, PUBG Corporation, Microsoft Studios, USA.
- L45. Rebellion Developments, 2005, *Sniper Elite*, Namco, Rebellion, USA.
- L46. Riot Games, 2009, *League of Legends*, PC, Riot Games, USA.
- L47. Rockstar Games, 2013, *Grand Theft Auto V*, Rockstar Games, USA.
- L48. Square Enix, 2002, *Kingdom Hearts*, Square Enix, Japan.
- L49. Sucker Punch Productions, 2002, *Sly Cooper*, PlayStation 2, Sony Computer Entertainment, USA.
- L50. Telltale Games, 2013, *The Wolf Among Us*, Telltale Games, USA.
- L51. Terminal Reality, 2012, *Kinect Star Wars*, LucasArts and Microsoft Studios, USA.
- L52. Turn 10 Studios, 2005, *Forza Motorsport*, Xbox, Microsoft Game Studios, USA.
- L53. Valve Corporation, 2013, *Dota 2*, Valve Corporation, USA.
- L54. Visual Concepts, 2018, *NBA 2K19*, 2K Sports, USA.

## 2 Genres and sub-genres used in initial game selection.

This list was only used to help diversify our initial game selection. Subsequent iterations relied on selecting games that maximized variability based on our initial coding. The non-exhaustive list of genres and sub-genres comes from [https://en.wikipedia.org/wiki/List\\_of\\_video\\_game\\_genres](https://en.wikipedia.org/wiki/List_of_video_game_genres), and game examples are drawn from the descriptions on this page.

Genre	Subgenre	Initially Selected Games	Core Task(s)
Action	Platformer	Donkey Kong	Reaction Time, Steering
Action	Platformer	Super Mario	Aiming, Reaction Time, Steering
Action	Shooter	Call of Duty, Overwatch	Aiming, Reaction Time, Steering, Pointing, Signal Detection, Signal Discrimination, Visual Search, Spatial Memory
Action	Fighting	Street Fighter, Tekken	Signal Detection, Reaction Time, Steering
Action	Stealth	Metal Gear, Sly Cooper	Signal Detection, Signal Discrimination, Reaction Time, Steering, Aiming, Pointing, Spatial Memory
Action	Survival	Resident Evil	Signal Detection, Signal Discrimination, Reaction Time, Steering,
Action Adventure	-	Legend of Zelda	Spatial Memory, Aiming, Pointing
Adventure	-	Myst	Steering, Pointing, Spatial Memory, Visual Search, Signal Detection
Roleplaying	Action-RP	Diablo	Steering, Pointing, Visual Search, Signal Detection, Signal Discrimination, Reaction Time, Aiming
Roleplaying	MMORPG	World of Warcraft	Signal Detection, Signal Discrimination, Reaction Time, Steering, Pointing, Aiming, Visual Search, Pattern Matching, Short Term Memory, Spatial Memory
Roleplaying	Sandbox RPG	Grand Theft Auto	Signal Detection, Signal Discrimination, Reaction Time, Steering, Pointing, Aiming, Visual Search, Pattern Matching, Short Term Memory, Spatial Memory
Simulation	-	Sims	Signal Detection, Signal Discrimination, Pointing, Visual Search, Pattern Matching, Spatial Memory
Strategy	Real-Time Strategy (RTS)	Starcraft II	Signal Detection, Signal Discrimination, Reaction Time, Pointing, Visual Search, Short Term Memory, Spatial Memory
Strategy	MOBA	League of Legends	Signal Detection, Signal Discrimination, Reaction Time, Pointing, Aiming, Visual Search, Short Term Memory, Spatial Memory
Sports	Racing	Forza Motorsports	Signal Detection, Reaction Time, Steering, Spatial Memory
Sports	Competitive	Rocket League	Signal Detection, Signal Discrimination, Reaction Time, Steering, Aiming, Visual Search, Spatial Memory