## Related Work & Background

## **Game Design**

- Enjoyment in games
- Game Design Principles
  - o Central Factors
  - Testing
- Player Preferences
  - o Goal-Directed Design
  - o Task-Centred System Design
  - o Requirements in Race Games
- Skill level progression and level design
  - Assistance systems
    - Other Games: Aim...
    - Race Games: Break...
  - Level Generation
    - Automated Level Generation
    - Factors a level is fun
    - Laser Scanning
  - Racing simulation

## **Racing Algorithms**

- Artificial Intelligence
  - o Artificial Intelligence in Video Games
  - o Autonomous Vehicles
  - o Dynamic Competition Balancing
- Ranking Systems
  - o Rating systems
  - Sports rating system
  - o Elo system
- Measuring Driving Performance
  - o Performance Assessment Methods
  - Driver Performance Metrics
  - o Spatiotemporal Pattern Recognition

## **Games Psychology**

- Personality traits
  - o Personality Theory
  - o Big Five
  - Sensation Seeking
- Learning and Motivation
  - o Cooperative Motivation

- Basic Elements of Cooperation
- o Competitive Motivation
  - Rivalry in Sport
  - Competition as Motivation
- Measuring Motivation
- Driving and Risk taking
  - o Risk Taking Behaviour
  - Reckless driving