Tarsier Studios

From

Research to Game Development

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What I did so far...

PhD in 2016: Hardware Trigger Upgrade at CMS (Gentner Stipend)

CERN Fellowship 2015-2017: Core Software Development for Future Circular Collider

Since 2017: Development Operations at Tarsier Studios

A word about CERN Fellowships

Two career tracks at CERN: Research and Technical

- Research: Focus on data analysis
- Technical: Mechanical engineering to experiment support
  - Hardware R&D
  - Collider physics
  - *Software development*

Motivation to Leave Research

1. Location
    a. Couple of Physicists... Probabilities
2. Workload
    a. CERN career: A lot of competition
    b. Working on the weekend not an exception
    c. Flexible working hours: I worked more
3. Something New

How did I look for something new?

Location was most important: What is in the vicinity?

Looked for Tech-Companies in general

- Software development seemed the obvious choice
- Game development always was a hobby
- Luck to find a position that fit me 100%

Tarsier History

2009
Rag Doll Kung Fu

2008-2010
LittleBigPlanet

2010-2013
LittleBigPlanet 2

2012
LittleBigPlanet PS Vita

2013-2015
LittleBigPlanet 3

2015
Tearaway Unfolded

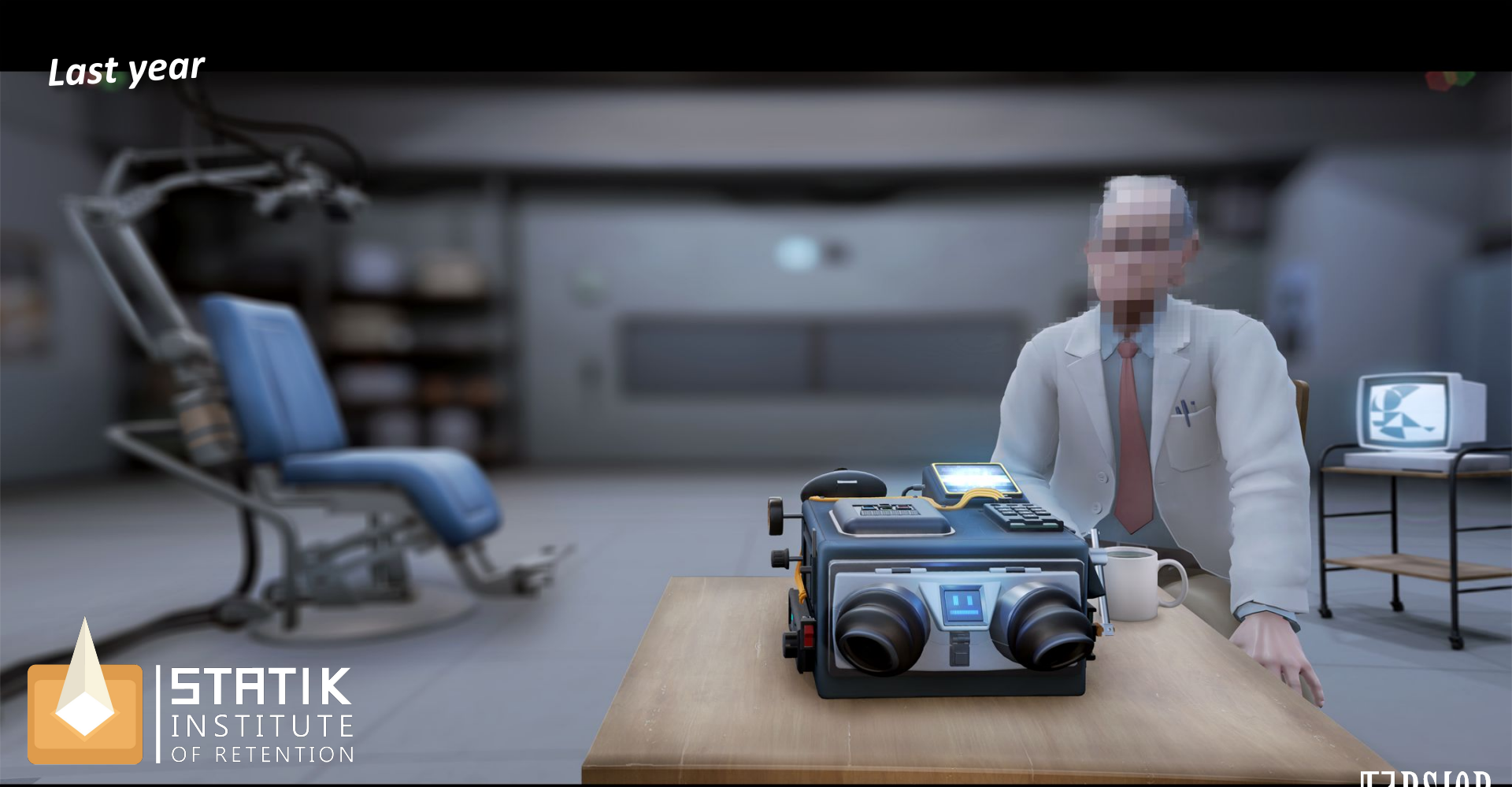
Founded in 2006. Now roughly 60 employees.

Last year

LITTLE NIGHTMARES

TARSIER STUDIOS

Last year



TARSIER
STUDIOS

My role at Tarsier: What is DevOps?

DevOps was coined in web-development:

- Minimize the boundary between development and deployment
  - Automation of processes and testing
  - Tracking of issues and analysis of causes
  - Minimize friction in release cycles

Being adapted in other areas of Software Development

- Continuous Integration, Testing and Deployment (e.g. Jenkins, Travis)
- Automation of repetitive processes (e.g. release notes creation)

My role at Tarsier: What does that mean?

Responsibility for our build system

- Make sure we can package the game
  - Close collaboration with Quality Assurance
- Distribute builds throughout the studio
  - If this doesn’t work, several people sit around doing nothing
  - Need a GUI to make this as simple as possible

Developing tools to simplify workflows

- Integrating task / issue tracking into daily routines
- Help to create automated testing framework

Skill transfer from PhD and Fellowship

Both PhD and Fellowship were software centred

- Best practices (wrote coding standard, programming lecture)
- Modern C++ (excellent course at CERN)
- Tools (Jenkins, compilers + static code analysis)

Harder to quantify but important:

- Self-organization: PhD means a lot of independent work
- Teamwork: It is essential to work together with others in physics
- Mentoring: You'll probably be helping Master students
- Self-improvement: You know how to soak up knowledge
- Problem solving: Essential for a PhD, important everywhere

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What specifically is different day to day?

- Work organization: Stand ups, task tracking and specified deliveries
- Mixed disciplines: Very different views!

Backup

Future Circular Collider: Candidate to follow LHC

- In a nutshell: Larger circumference, better magnets
- Core software:
  - Small group of developers
  - Focus on reusability (prevent wasted efforts)
  - Collaborate with existing experiments
  - Optimize parallelization