CHAOSS

THE LINUX FOUNDATION PROJECTS

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Lightning Talk @ CHAOSSCon Europe
Brussels, February 1st 2019

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SoHeal 2019 http://soheal.github.io

2nd Int'l ICSE Workshop on Software Health

Montréal, Canada – May 28, 2019

What?

- Focus on the *health* of software projects, communities and ecosystems
- Discuss about technical, social, legal and business aspects related to project effectiveness, success, longevity, growth, resilience, survival, diversity, sustainability, popularity, inclusiveness, ...

Who?

- Open Source Community Members, Industry and Academia

Why?

- Raise awareness on software health
- Present tools, methods, practical experiences
- Advance body of knowledge on software health

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SoHeal 2019 http://soheal.github.io/cft.html

Call for practitioner talk proposals

Are you a involved in software projects or ecosystems, and have something to say about software health?

Submit a **talk proposal** on

- Open source and industrial experiences from individual, team or community level
- Relation between software health and social, technical, legal, process and business aspects
- Tools, dashboards and models to enable, assess, predict and recommend software health
- Guidelines and lessons learned

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Submission deadline: February 15, 2019

- title + abstract (max 500 words) + presenter bio
  https://easychair.org/conferences/?conf=soheal2019

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www.secohealth.org

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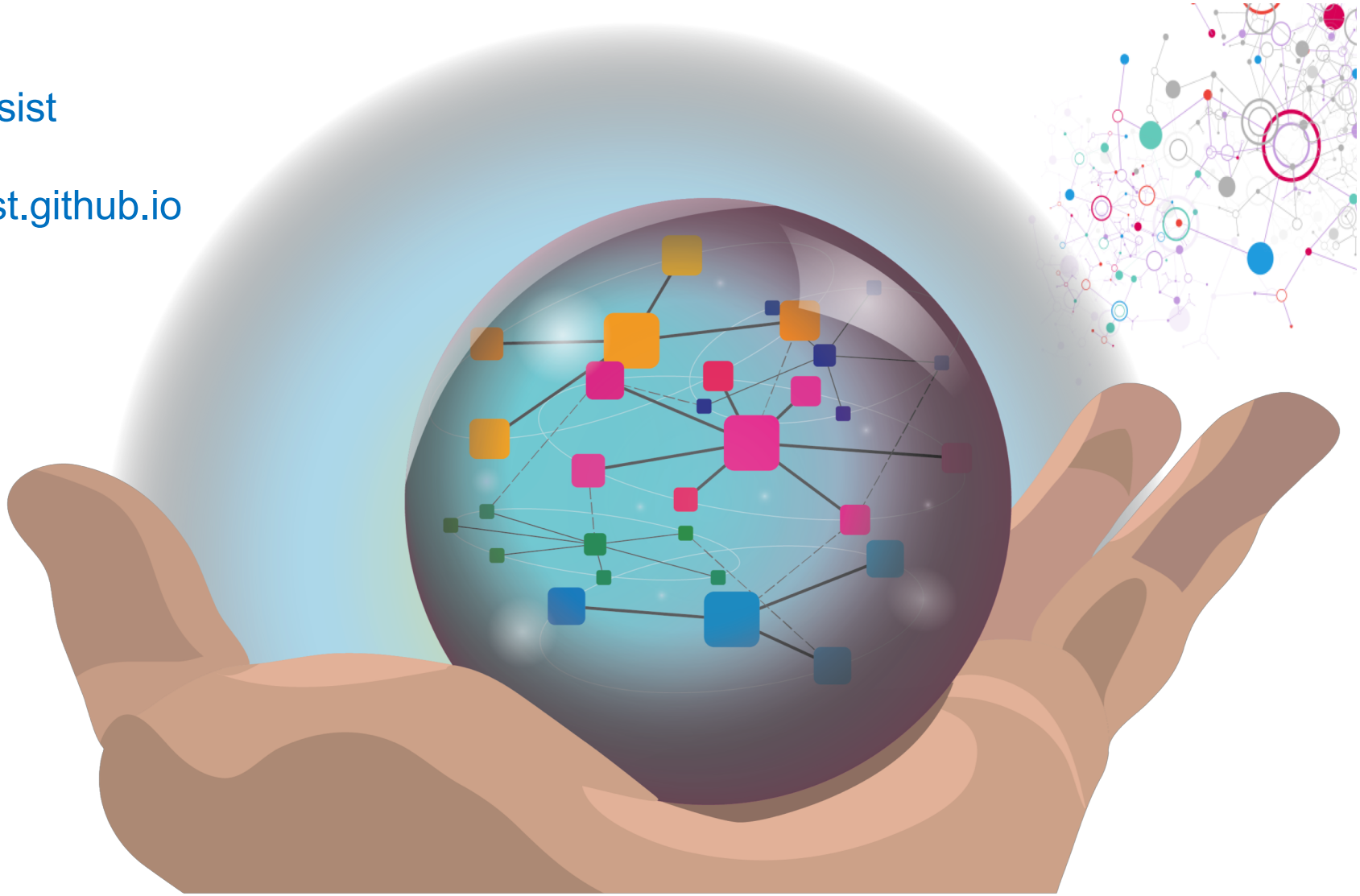

SECO-Assist

"Excellence of Science" Research Project

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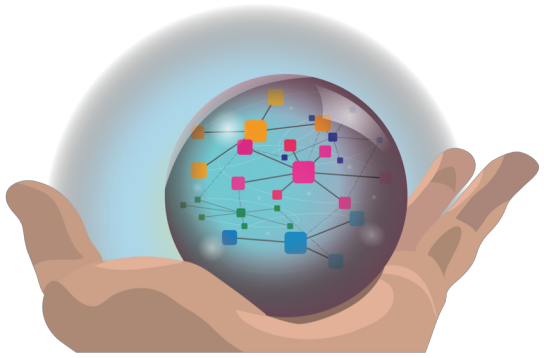
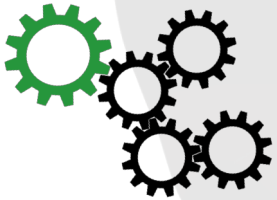


Research Goals

Fundamental

- Understand socio-technical factors of software ecosystem health
- Predict and increase long-term sustainability of software ecosystems

Applied



Develop recommendation tools to assist developer communities in increasing their productivity, interaction, sustainability, diversity, …

Software Ecosystem Health Issues

- Dependency problems
- Unmaintained or outdated libraries
- Security vulnerabilities
- Technical lag
- ...

- Contributor abandonment / Bus factor
- Lack of communication / interaction
- Insufficient social diversity
- Social conflicts
- Cultural differences
- ..

Recent work

"Technical lag" measurement framework

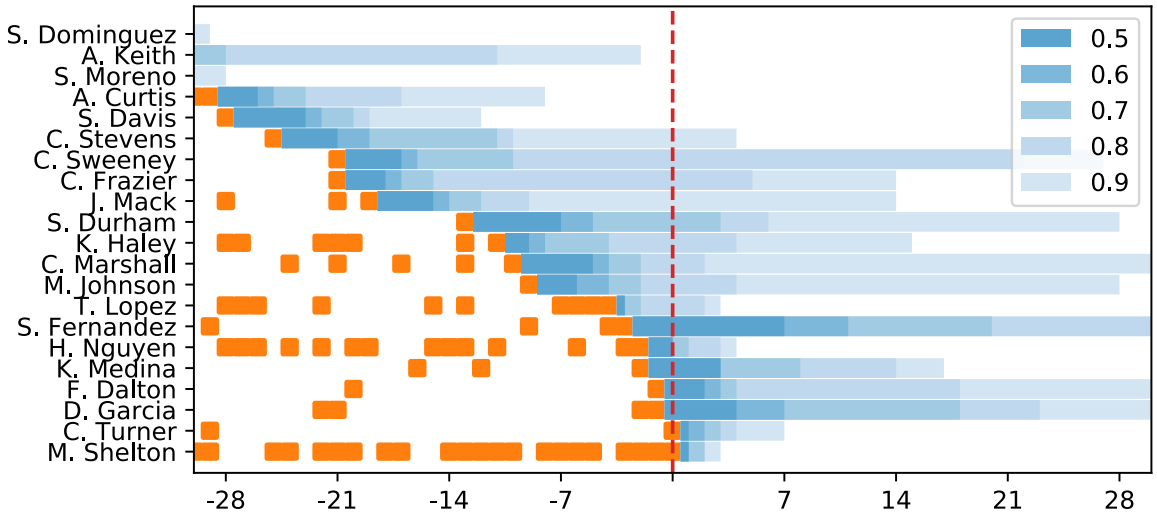
- Assesses how outdated a software deployment is w.r.t. outdated dependencies
  (Zerouali, Gonzalez-Barahona, Robles, Mens, Constantinou, Decan)
- Contact ahmed.zerouali@umons.ac.be for an interview !

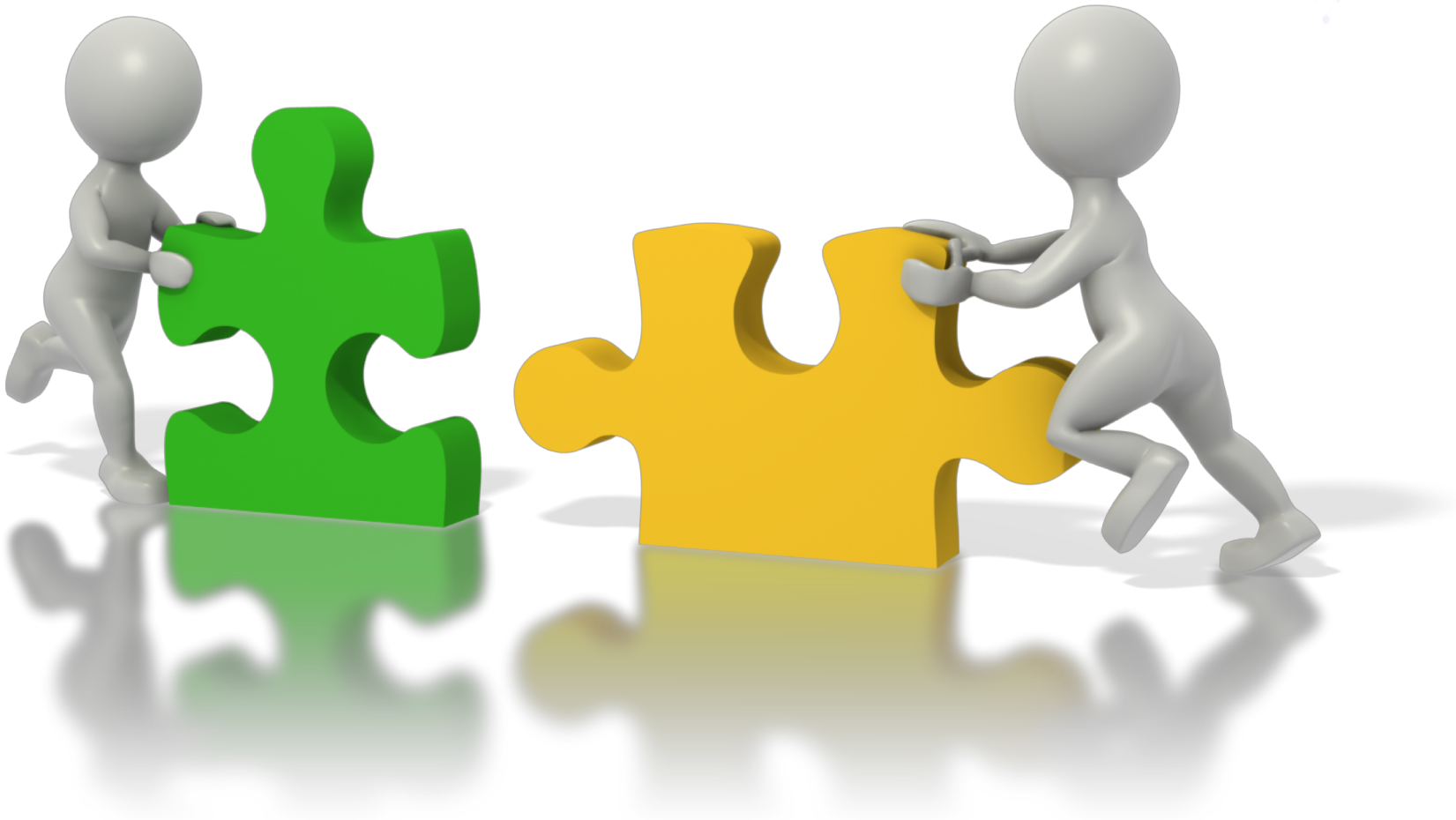
ConPan tool https://github.com/neglectos/ConPan

- Inspects Docker containers and analyses technical lag of their installed packages.

GAP tool

- Forecasting future commit activity in git projects



Join forces

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