




Software Productisation

IPAndemic

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Introduction

- Vadim Zaytsev aka @grammarware ()
 - research ()
 - teaching ()
 - industry ()
- Productisation experience:
 - HLASM, TIALAA, etc
 - AEC of ICSE, MoDELS, SLE
 - Best Artefact, Top Performer



Project vs Product

- Development cycle
- Make it work
- Zero to one customers
- Fixed features
- Single or no deadline
- Short-term team
- Contract-based income
- Akin to writing a paper

- Life cycle
- Make it right
- One to many customers
- Ongoing support
- Continuous delivery
- Long-term team
- Can be passive income
- Akin to getting a PhD

The Main Difference

- Projects are done when they are done
- You need to stand by your product
 - `reliably`
 - for `years` to come
 - offering `support`
- `Not` always desirable

**Should
Programs
Be Reviewed
by the Program Committee?**

Artefact Evaluation

- Any part of the “paper” beyond the PDF
- **Goals**
 - packaging
 - archival
 - evaluation
 - replication
- **Metagoals**
 - reality check
 - archival
 - persistence
 - career



Types of Research Artefacts

- Motivation
- Hypothesis
- Executable model
- Checklist
- Bibliography
- Script
- Commentary
- Visualisation
- Data (raw or derived)
- Sampling
- Tutorial material
- Guidelines for the future
- Actual paper text
- Algorithm
- Program
- Proof

Artefact Evaluation Process

- Read & follow submission guidelines
- Submit on time
- Kicking the tires
- Evaluation
 - **Insightful** (timely, smart)
 - **Useful** (purpose, effect)
 - **Usable** (understandable, available, installable)
- Notification & adding a badge

e.g., <http://icsme2016.github.io/cfp/artifacts-track.html>

Artefact Evaluation Levels



- Documented
- Consistent
- Complete
- Exercisable

Artefact Evaluation Levels



- Functional
- Exceeding expectations
- Facilitating

Artefact Evaluation Levels



- Functional
- Reusable
- Stored with a DOI

Artefact Evaluation Levels



- Functional
- Reusable
- Available
- Same results obtainable

Conclusion

- **Project \neq Product**
- The future of **artefact evaluation**:
 - publishing without artefacts is outlawed
 - **AEC** influences **PC**
 - artefacts can be submitted independently
- ~~<https://artifact-eval.org>~~
 - <https://github.com/csartifacts/resources>
- Questions?