The Algorithmic-Autoregulation essay

a collective and natural focus on self-transparency

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Abstract

There are numerous pursues for a lightweight and systematic account of what is done by a group and containing individuals. The AA (Algorithmic-Autoregulation) is a special case, in which a technical community embraced the challenge of registering their own dedication for sharing processes, self-transparency enhancements, and prove dedication. AA is used since June/2011 by dozens of users, with the support of different software gadgets and for distinct tasks. Intermittence and activity concentration of users activity follows expected natural properties. Social participation and ontological understandings of AA eases comparative analysis and furthers integration.

Resumo

Keywords: distributed development, floss, social participation, OWL, statistics, anthropological physics

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1 AA start

The Algorithmic Autorregulation (AA) is a self-transparency mechanism for sharing processes, proving dedication, and enhance personal of collective self-transparency. Purposes for AA usage are numerous: enable automated and fair compensation for dedications, ease co-working, introduce new-commers, and keeping public historical logs of activities, etc. Indeed, other systems have been designed for such a task (see Section 1.1). A brief characterization of AA is:

- The collective origin, purpose and upkeep. This is a free-culture trait, present within many software, and leads to open software and data as described in Section 2.
- Voluntary logging of messages about ongoing work.
- Aimed at coordinating distributed team work through individual merit.
- More a practice than a software: AA presents variations on the software support and message composition. Often present are screencasts, peer validation and periodic messaging.

Transparency in this context should be understood as usual organization or State transparency is: a public account of activities [1]; not directly as transparency in self-knowledge, as is the case in some philosophical and political contexts [2]. One should reach [3] for a noteworthy overview of AA as a Global Software Development (GSD).

1.1 Related work

Authors know of no *civil society transparency* platform. There is a number of transparency initiatives for governments [4], for religious parties [5] and for private institutions [6]. Data analysis methods are derived from Natural Language Processing (NLP) and Complex Networks (CN) fields, constituting a hybrid framework of classical [7, 8] and novel [9, 10] approaches.

1.2 Historical note

7th June, 2013, Cleodon Silva [11] died by heart failure. In his memory, the labMacambira.sf.net group was born (Pedro Macambira was one of this pseudonyms). The AA was conceived as the "cardiac pulse" of the group and is in constant usage since July, 2011. It gathers thousands of messages, tenths of users and hundreds of processes. AA messages present contributions, such as commits to official repositories of Evince, Firefox, OpenOffice, Puredata and other software [3]. Also, a number of other activities were registered: new software ellaboration and coding, writing of articles, wikis and etherpads; articulation of civil society, academic and State instances; studies and reviews. Even so, AA is highly biased towards software development, as can be observed in Sections 3 and 4, and in the GSD article about AA [3].

2 AA Systems and data

There are different software support for AA (Section 2.1). Also, distinct use methods are incident (Section 2.2). This section exposes this diversity and their integration, as linked data, both within AA variants and within participatory instances.

2.1 Software support

There are mainly three software pieces written to support AA activity. Two of them are a server and client suite each (see Sections 2.1.2 and 2.1.3). The third is a fancy dashboard. Automated conversational agents (software [ro]bots) were used as alternative User Interfaces (UIS), with a highlight for

the Lalenia bot (see Section 2.1.4), and an initiative to make AA available in all chat networks (see Section 2.1.5).

All AA software apparatus is contextualized in Table 1.

2.1.1 First AA: server skin and shell client

Although deprecated in favor of AA 01, this first AA software presents the most numerous set of functionalities. To understand them, one needs to observe core design features:

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Client functionalities are:

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Server functionalities are:

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Further information of this and other versions of AA are contextualized in Table 1.

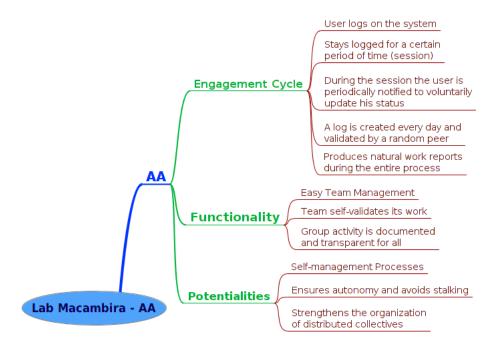


Figure 1: A mind map of the AA methodology shared by users: i) Engagement cycle – the usage of AA; ii) Functionality – the design goals of the system; iii) Potentialities – envisioned benefits of AA by authors of the diagram. As seen in Section 1, core benefits emanate from the self-transparency aspect of AA, with worthy mentions to proving dedications and sharing processes.

Table 1: All considered AA versions and their databases.

version name	main language	user interface	database

- 2.1.2 PAAinel
- 2.1.3 AA 01
- 2.1.4 Lalenia interface
- 2.1.5 Ubiquitous AA
- 2.1.6 Messages in the #labmacambira@Freenode IRC channel log
- 2.2 Systematic use proposals
- 2.3 The OntologiAA OWL ontology
- 2.4 RDF data
- 2.5 Linkage to other participatory data
- 3 Statistics
- 4 Results
- 5 Conclusions
- 5.1 Further work

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