It Takes a Village: Understanding the Community Aspects of Interdisciplinary Tutorials

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CONTEXT

- Tutorial development in interdisciplinary fields is challenging because members of the audience come from various disciplinary backgrounds [1][2][3].
- Bioinformatics software tutorials often direct their users to respective user communities.

RESEARCH QUESTIONS

- RQ1. Who are the stakeholders of community ecosystems?
- RQ2. What are the motivations of these stakeholders?
- RQ3. How does the ecosystem supplement the tutorial affordances in interdisciplinary environments?

KEY STAKEHOLDERS IN THE BIOINFORMATICS SOFTWARE TUTORIAL ECOSYSTEM

%	Promotion-of-Community Features [4]
32%	a. Instructions written by community members
14%	b. User rating
77%	c. User feedback form
41%	d. Use cases via featuring user work
14%	e. Developer-organized social events
77%	f. Developer-promoted discussion group

Users who became Trainers User **Original Developers**

COMMUNITY



- 10k Tools (majority bioinformatics)500k Registered Users
- COMMUNITY HUB >400 Tutorials Archived [5][6][7]

Why?: One of the biggest communities known

SAMPLING METHODS

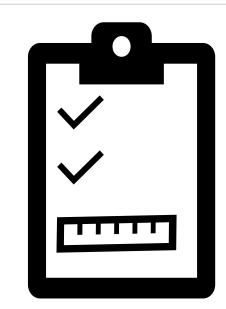
Recruiting using a combination of

Snowball sampling and Purposive sampling [8]

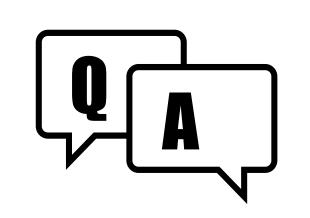


Aim: 40+ Participants

DATA COLLECTION



Pre-Survey



Semi-Structured Interview

DATA ANALYSIS



Open Coding



In Vivo

KEY TAKEAWAYS

- 1. There is the third type of stakeholders involved in the bioinformatics software tutorial ecosystem other than users and original developers: users who became trainers.
- 2. Our study will provide insights into how the community ecosystem can cater to users who come from various disciplinary backgrounds.

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