Alexander T. J. Barron

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Bloomington IN 47408

EDUCATION School of Informatics, Computing, and Engineering, Indiana University, Bloomington, USA

Ph.D. Candidate in Informatics, Complex System track from August 2012

• Advisor: Johan Bollen

University of New Mexico, Albuquerque, New Mexico, USA

B.S. double major in Physics and Mathematics

August 2011

RESEARCH INTERESTS Cultural innovation

• In particular: devoloping measurements of innovation and the effectiveness of innovation on new content in context.

Identity, social group formation, and language use.

 Does identity inspire group formation, or vice versa? Measurement of these interrelated concepts using language as data.

PUBLICATIONS

Journals

Alexander T. J. Barron, Jenny Huang, Rebecca L. Spang, Simon DeDeo. (2018). Individuals, institutions, and innovation in the debates of the French Revolution. *Proceedings of the National Academy of Sciences*, 115 (18).

• (This research is covered by multiple media including Christian Science Monitor)

Rui Fan, Ali Varamesh, Onur Varol, **Alexander T. J. Barron**, Ingrid van de Leemput, Marten Scheffer, Johan Bollen. The minute-scale dynamics of online emotions reveal the effects of affect labelling. In press.

Conference Presentations

Alexander T. J. Barron, Jenny Huang, Rebecca L. Spang, Simon Alexander T. J. Barron and Johan Bollen. *Social Media Analysis Bias Due to Performative Self-identification*. Data and Algorithm Bias Workshop, Conference on Information and Knowledge Management 2017, Singapore.

Alexander T. J. Barron and Johan Bollen. *Developing a Moral NLP Toolkit*. Conference on Complex Systems 2017, Cancún, Mexico.

Alexander T. J. Barron, Jenny Huang, and Simon DeDeo. *Speech Innovation During the French Revolution*. Conference on Complex Systems 2015, Phoenix, AZ.

Alexander T. J. Barron, Emilio Ferrara, Giovanni Ciampaglia, Alessandro Flammini. *Price, Popularity, and Growth Dynamics of Bitcoin*. Computational Approaches to Social Modeling Satellite, Websci 2014, Bloomington, IN.

Posters

Alexander T. J. Barron, Jenny Huang, Rebecca L. Spang. *Speech Innovation During the French Revolution*. Conference on Complex Systems 2015, Phoenix, AZ.

• (This poster won Honorable Mention in the Language, Linguistics, Cognition and Social Ecology Track)

EMPLOYMENT HISTORY

Research Assistant

2014-present

IU School of Informatics and Computing

- with Johan Bollen: analyzing social media content using Moral Foundations Theory, part of the DARPA Next Generation Social Science grant.
- with Simon DeDeo: information-theoretic analysis of political speech during the French Revolution

Associate Instructor 2012-2014

IU School of Informatics and Computing

• Classes: Mathematical Foundations of Informatics and Research Methods in Informatics

AND HONORS

AWARDS, GRANTS Poster Honorable Mention in Language, Linguistics, Cognition and Social Ecology Track and CCS'15

UNM Regents' Scholarship Winner 2006-2010

SKILLS

Python, scikit-learn, NLTK, Stanford NLP suite, R, Gephi, Git, Github, Jazz Drumset (since 7 years old!)