AKANKSHA ATREY

Curriculum Vitae

518-772-8962 ° aatrey@cs.umass.edu LinkedIn: www.linkedin.com/in/akankshaatrey

CAREER FOCUS

I am pursuing my Ph.D. in Computer Science in the field of Artificial Intelligence and Machine Learning under Dr. David Jensen at UMass Amherst with the intention of pursuing a career in academia. My current research work is oriented towards explainable AI using causal modeling techniques.

EDUCATION

Sept 2017 – present	University of Massachusetts Amherst
	- M.S./Ph.D. in Computer Science
Aug 2014 – Dec 2016	University at Albany, SUNY
	- B.Sc. Computer Science and Mathematics
	- Summa Cum Laude (4.0 GPA)
	- Dean's List of Distinguished Students, Presidential
	Honor Society, Tau Sigma National Honor Society
Sep 2013 – Jun 2014	University of Winnipeg
	- Only freshmen year of degree completed here (3.96
	GPA)
	- Dean's Honor List
Sep 2010 – Jun 2013	Fort Richmond Collegiate, Winnipeg, MB
	- High School Diploma
	- Summa Cum Laude

RESEARCH EXPERIENCE

May 2016 – Jun	Rutgers University, New Brunswick (Prof. Vivek Singh)
2017	"Faces in Places: Real-time Diversity Analytics Using Social
	Media"
	- Field: Machine Learning, Social Computing, Statistics
	- Paper accepted in ICWSM 2017
	- Paper accepted at ACMMM 2017 (Funded by ACMMM)

Aug 2016 – Dec 2016

University at Albany, SUNY (Prof. Feng Chen)

"Twitter Popularity Diffusion of Presidential Candidates through Detection of Twitter Bots"

- Field: Machine Learning, Data Mining
- Presented poster at MIT IEEE Undergraduate Research
 Conference 2016 (Funded by CEAS, SUNY Albany)

Jan 2016 - Feb 2017

University at Albany, SUNY (Prof. Teresa Harrison)

"E-petition Information Diffusion in Online Social Networks"

- Field: Informatics, Social Computing, Statistics
- Presented poster at Digital Government Society
 Conference 2016
- Paper accepted in **Digital Government Society** Conference 2017 (Won best paper award)
- Journal paper submitted in Government Information
 Quarterly 2018

Nov 2014 – Dec 2015

University at Albany, SUNY (Prof. Elizabeth Munch)

"Reeb Graph Based Validation of Statistical Predictive Models for the Spread of AIDS"

- Field: Computational Topology, Statistics, Graph Theory
- Presented poster at New York Celebration of Women in Computing 2015 (Funded by CCI, SUNY Albany)
- Presented poster at Grace Hopper Celebration of Women in Computing 2015 (Funded by Initiatives for Women and CCIWIT, SUNY Albany)

WORK EXPERIENCE

Jan 2017 - Aug 2017

Software Engineer at IBM, Poughkeepsie, NY

 L2 Service for IBM z/OS mainframe. Specifically, I worked with the Supervisor and RTM components.

Jan 2015 - Dec 2016

Teaching Assistant (Computer Science) at **University at Albany, SUNY**

- Introduction to Computer Science, Programming at the Hardware/Software Interface, Systems Programming, Automata Formal Theory
- Responsible for grading, conducting labs and holding office hours

Sep 2016 - Dec 2016	Software Developer Intern (Backend) at Auto/Mate	e
	Dealership Systems, Albany, NY	
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- Worked on ReportMate, responsible for COBOL to Pre-SQL conversions
- Languages/Tools: Java, SQL

Feb 2016 – May 2016 Software Developer Intern (Backend) at **Commerce Hub, Albany, NY**

- Worked in Product Stream team, responsible for various updates, writing testing scripts, etc.
- Languages/Tools: Java, Groovy, MongoDB, Spock

May 2015 – Aug 2015 Web Developer Intern (both frontend and backend) at **VoxVilla, LLC, Albany NY**

- Responsible for creating database and design of website
- Languages/Tools: Java, PHP, HTML5, SQL

May 2015 – Aug 2015 **Office of Marketing and Communications University at Albany, SUNY, NY**

- Social surveyor and information gatherer for the SUNY Albany app and website

AWARDS AND HONORS

May 2017	Lita and Stephen Greenwald Research Fund Award 2017
April 2017	ISO President's Medal for Exemplary Leadership
April 2017	Spellman Top Academic Achievement Award
Oct 2016	CRA-W Research Scholar (for Grace Hopper Celebration)
May 2016	Bruce B. and Louise Steen Gravitt Scholarship
Mar 2016	Spellman Top Academic Achievement Award
Jan 2016	Tau Sigma National Honor Society Scholarship
Jun 2015	Women and Technology Award and Scholarship
Sep 2013	Ross A. Johnston Entrance Scholarship in Math and Statistics

EXTRACURRICULAR

Jun 2016 – present	Indian Student Organization – Vice President
	- University at Albany, SUNY
Mar 2016 – present	Tau Sigma National Honor Society - President
	- University at Albany, SUNY
Sep 2015 - present	Transfer Student Peer Mentor
	- University at Albany, SUNY
Mar 2015 - Mar 2016	Tau Sigma National Honor Society - Secretary
	- University at Albany, SUNY
Jan 2015 - Apr 2015	Asian Pacific American Conference - Logistics Chair
	- University at Albany, SUNY
Aug 2012 - Jun 2014	Victoria General Hospital - Lunch Distributer
	- Winnipeg, MB, Canada

PUBLICATIONS

Dumas, C. L., Atrey, A., Lee, J., Harrison, T. M., Fake, T., Zhao, X., & Ravi, S. S. (2016, June). E-petition Information Diffusion in Online Social Networks. In *Proceedings of the 17th International Digital Government Research Conference on Digital Government Research* (pp. 515-517). ACM.

Harrison, T. M., Fake, T., Dumas, C., May, W., DePaula, N., Atrey, A., ... & Ravi, S. S. (2017, June). E-Petitioning and Online Media: The Case of# BringBackOurGirls. In *Proceedings of the 18th Annual International Conference on Digital Government Research* (pp. 11-20). ACM. **(Won the best paper award)**

Singh, V. K., Atrey, A., & Hegde, S. (2017, October). Do Diverse Social Interactions Make Us Smile More Often? Studying Smiles and Diversity Via Social Media Photos. In *ACM Multimedia 2017* (pp. 1818- 1827).

Singh, V. K., Hegde, S., & Atrey, A. (2017, May). Towards Measuring Fine-Grained Diversity Using Social Media Photographs. In *ICWSM 2017* (pp. 668-671).

TECHNICAL STRENGTHS

Languages:	Java, Python, C, MIPS Assembly Language, Groovy, JavaScript,
	MATLAB
Tools/Frameworks:	MySQL, JDBC, Unix, Mockito, Spock, Apache, Gradle, MongoDB,
	Jupyter Notebook