

DRAFT

## COMM 620: Research Practicum in Big Data for Games

Thursdays, 12:30 - 3:20

Room: ANN 406

Instructor: Dmitri Williams, Associate Professor

Email: [dcwillia@usc.edu](mailto:dcwillia@usc.edu)

Office: ANN 414K

Students will be exposed to the fundamentals of large-scale data analysis in an applied joint project with a large video game developer, [Wargaming.Net](http://Wargaming.Net) and their main game, *World of Tanks*, though other games in their portfolio are on the table as well. The developer has agreed to let me supervise students gaining access to its very large databases, as well as to potentially do live research on current players of its games. I am planning a semester where we start by quickly generating enough knowledge about the game, players and game research, and testable hypotheses to propose research topics and complementary survey questions. We will cover theories of computer-mediated communication, organizational communication and human-computer interaction so that we can generate theory-driven hypotheses and pick the appropriate methods to address them. Ideally, this course will have students from both the social and computer sciences in it to form interdisciplinary teams.

While our proposals are being reviewed and data are being assembled, we will be learning or reviewing large-scale data techniques in three areas: classical statistics, network analysis and machine learning. When the data come back, we shift into research, analysis, iteration, and production mode, working to create solid, publishable papers.

Students will generate projects tailored to their own interest, but will also be playing secondary co-author roles on other students' projects. Regardless of what projects they are working on, students will be operating in heavy workshop mode, i.e. reading, reviewing and improving each other's proposals, results and papers.

### Grading

Because the class is focused on producing research, the majority of the grade will be drawn from the preparation, analysis and writing process, as well as the final paper, which should be ready for submission to a conference and/or journal.

Participation: 20%

Paper prep: Presentations, peer feedback, outlines, proposals, etc.: 30%

Research paper: 50%

## Academic Integrity Policy

The School of Communication is committed to the highest standards of academic excellence and ethical support. It endorses and acts on the school policies and procedures detailed in the SCampus section titled: "University Student Conduct Code." See especially Appendix A: "Academic Dishonesty Sanction Guidelines." The policies, procedures, and guidelines will be assiduously upheld. They protect your rights, as well as those of the faculty. It is particularly important that you are aware of and avoid plagiarism, cheating on exams, fabricating data for a project, submitting the same paper to more than one professor, or submitting a paper authored by anyone but yourself. If you have questions about any of these matters, confer with the instructor.

## Academic Accommodation based on Disability

Any student requesting academic accommodation based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to the instructor as early in the semester as possible. DSP's phone number is (213) 740-0776.

## Schedule

Date	Class #	Session	Readings/Assignment
Jan. 10	1	Game research I	TBD
Jan. 17	2	Game analytics	TBD
Jan. 24	3	Developer operations and business models	Review and present on one major WG Tableau dashboard
Jan. 31	4	Databases: Using R and SQL. Initial topics workshop	First theory and hypotheses drafted
Feb. 7	5	Machine Learning Models. Likely guest: Prof. Jaideep Srivastava	Draft possible survey questions in shared Doc
Feb. 14	6	Topics and surveys finalized	Presentations for Proposals to WG
Feb. 21	7	Stats using large data: Review of regression, etc., for scale	Data collection requests filed
Feb. 28	8	Network Analysis	
Mar. 7	9	Game research II	
Mar. 14		Spring Break	
Mar. 21	10	Initial results/visualizations/ first pass	Outlines due
Mar. 28	11	Group reports/workshop I	

Apr. 4	12	Group reports/workshop II	Second round of analysis
Apr. 11	13	Paper Workshop I	First drafts
Apr. 18	14	Paper Workshop II	Second drafts
Apr. 25	15	Presentations to WG	

## Statement on Academic Conduct and Support Systems

### Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” [policy.usc.edu/scampus-part-b](http://policy.usc.edu/scampus-part-b). Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

### Support Systems:

*Student Counseling Services (SCS)* – (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. [engemannshc.usc.edu/counseling](http://engemannshc.usc.edu/counseling)

*National Suicide Prevention Lifeline* – 1 (800) 273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. [www.suicidepreventionlifeline.org](http://www.suicidepreventionlifeline.org)

*Relationship and Sexual Violence Prevention Services (RSVP)* – (213) 740-4900 – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. [engemannshc.usc.edu/rsvp](http://engemannshc.usc.edu/rsvp)

*Sexual Assault Resource Center*

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: [sarc.usc.edu](http://sarc.usc.edu)

*Office of Equity and Diversity (OED)/Title IX Compliance* – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. [equity.usc.edu](http://equity.usc.edu)

*Bias Assessment Response and Support*

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. [studentaffairs.usc.edu/bias-assessment-response-support](http://studentaffairs.usc.edu/bias-assessment-response-support)

*The Office of Disability Services and Programs*

Provides certification for students with disabilities and helps arrange relevant accommodations. [dsp.usc.edu](http://dsp.usc.edu)

*Student Support and Advocacy* – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. [studentaffairs.usc.edu/ssa](http://studentaffairs.usc.edu/ssa)

*Diversity at USC*

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. [diversity.usc.edu](http://diversity.usc.edu)

*USC Emergency Information*

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. [emergency.usc.edu](https://emergency.usc.edu)

*USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime.*

Provides overall safety to USC community. [dps.usc.edu](https://dps.usc.edu)



