Adrian Ernesto Radillo

Curriculum Vitae Oct 2017

The world is complex and beautiful.
Let's be a part of this!

Personal Skills

➤ High level of organization

➤ High level of critical thinking and synthesis

➤ Great interpersonal skills

➤ Visionary concerning technologies: I am the lead (self-taught) developer of IndieK (FOSS)

Research Publications

Theoretical Neuroscience

2017
peer-reviewed **Radillo, A. E.**, Veliz-Cuba, A., Josić, K., & Kilpatrick, Z. P., *Evidence accumulation and change rate inference in dynamic environments*, Neural Computation, 29(6), 1561-1610.
We derive an optimal strategy for accumulating evidence in a changing environment, as well as a potential neural network implementation. See here for a summary.

Clinical Psychology

2012
peer-reviewed Donard, V., Berget, P., Cramet, M., Gantelmy d'Ille, V., Mörch, C., . . ., **Radillo, A.,** & Virole, B., *Identity and relational stakes in MMORPG*, Pratiques Psychologiques, 18(1), 23-36.
Psychoanalytic and psychosocial exploration of the impact of Massively Multiplayer Online Role Playing Games on gamers.

2010
book Virole, B., & **Radillo, A.**, *Cyberpsychologie*, Paris : Dunod.
Essay on how video games and new technologies in general, affect both the theory and the practice of contemporary clinical psychology.

2009
peer-reviewed **Radillo, A.**, *L'expérimentation de l'utilisation des jeux vidéo en remédiation cognitive*, Enfance & Psy, n° 44, Paris : Erès.
Short summary of my Master's thesis in psychology, on cognitive rehabilitation of autistic children through video games. Click here for an English summary.

Education

2014–2018   **Ph.D. Mathematics (Expected)**, *University of Houston*, Houston, TX, USA.
Advisors: Krešimir Josić & Zachary P. Kilpatrick.
Key courses:

> ➢ **Machine Learning**, both by Robert Azencott and Ankit Patel

> ➢ **Theoretical Neuroscience** by Xaq Pitkow and Harel Shouval

2011–2014   **B.Sc. Mathematics**, *University of Warwick*, Coventry, UK.

2004–2009   **M.A. Clinical Psychology**, *Ecole de psychologues praticiens*, Paris, France.
Advisor: Véronique Donard.

Awards

2014-2016   **Presidential Cullen and Stella Ehrhardt Fellowship**, $4,000, University of Houston.

2012   **Undergraduate Research Scholarship Scheme**, £1,600, University of Warwick.

Professional Experience

2013-2016   **Teaching Assistant**, *Several undergraduate level courses*, Univ. Warwick/UH, UK/USA.
Calculus, Statistics, Mathematical Biology, French.

2010
(Full year)   **Clinical psychologist**, *Adult psychiatry service*, General Public Hospital of Dreux, France.
Counseling, support groups, personality and cognitive skills assessment for patients suffering from grave mental illness. Close collaboration with psychiatrists, nurses and other psychologists.

Computing Skills

Basic   C++, R, Visual Basic

Intermediate   MySQL, Python (Numpy, TensorFlow), MATLAB

Advanced   Bash, git

Spoken Languages

Fluent   **French, Spanish, English**   *French & Spanish as mother tongues*

FOSS project

IndieK is a Free Open Source Software project that I publicly launched a month ago. I see it as a cognition enhancer. You may read more on my personal blog.

Research Involvement

Internships

2015 (Fall)	**Visiting student**, *Instituto de Fisiología Celular*, Universidad Autónoma de México, Mexico City, Mexico. Ranulfo Romo's lab Electro-physiology on macaque in tactile frequency discrimination task.
2012 (summer)	**Research Intern**, *Institute of Digital Healthcare*, Coventry, UK. Project on signal processing of sound-evoked EEG signals.
2006–2009	**Psychology Intern**, *Several public hospitals*, Paris/Rivière du Loup, France/Canada. More than 1600 hours of internship with main emphasis on psychopathology and cognitive rehabilitation.

Workshops

2017	Theoretical Neuroscience Workshop, (PIs: Kilpatrick, Zylberberg), University of Colorado Boulder, CO. Talk: *Evidence accumulation in changing environments*.
2017	Memory School (MATHMEM), Centre de Recercà Matematica, Barcelona, Spain. Topic: biology and mathematics of memory Poster: *Change rate inference in dynamic environments*.
2016	Gene Golub SIAM Summer School, Drexel University, Philadelphia, PA. Topic: SDEs and wave propagation Poster: *Evidence accumulation and change rate inference in dynamic environments*.
2016	CoSyNe - main conference & workshop, Salt Lake City, USA. Poster: *Evidence accumulation and change rate inference in dynamic environments*.

Conferences

2017	Joint Theoretical Neuroscience Lab Meeting, (PIs: Doiron, Shea-Brown, Josić, Kilpatrick, Rosenbaum), University of Pittsburgh, PA. Talk: *Evidence accumulation in changing environments*.
2017	Computational and Systems Neuroscience, (CoSyNe), Salt Lake City, UT. Poster: *Change rate inference in dynamic environments*.
2017	Gulf Coast Consortium for Theoretical & Computational Neuroscience, (GCC-TCN), Houston, TX. Poster: *Change rate inference in dynamic environments*.

2016   GCC-TCN, Houston, TX.
       Poster (**Award for best poster presentation**): *Evidence accumulation and change rate inference in dynamic environments.*

2015   UT Austin Conference on Learning and Memory, Austin, TX.

Web links

- ➢ Academic webpage: www.math.uh.edu/~adrian
- ➢ Personal blog: https://adrianblogtech.wordpress.com
- ➢ GitHub repositories: https://github.com/aernesto
- ➢ Twitter account: @AdrianERadillo
- ➢ LinkedIn profile: www.linkedin.com/in/adrian-ernesto-radillo