**Education**

PhD. In Education, Technology and Drama at Tufts University, **Feb, 2008.**

Thesis Title: *Virtual Forum Theater: Creating and sharing drama to resolve conflicts.*

Thesis Advisors: Alva L. Couch, Downing Cless, Marina Bers.

Master in Arts in Education at Harvard Graduate School of Education, **June, 2001.**

Graduate Coursework in Computer Science at Harvard Extension School.

Graduate coursework in Drama and Learning at Leslie College and Emerson College.

B.S. in Electrical Engineering, Federal University of Bahia**.**

**Relevant Experience**

**Assistant Teaching Professor** [Northeastern University](http://www.northeastern.edu/) Boston, Ma **Aug, 2018– present**

Supporting the alignment, lead, quality and growth of Master of Professional Studies in Analytics (MPSA) program; has designed and launched the Bachelors in Analytics (BSA); collaborating with Academic Quality Assessment, Online Experiential Learning, Marketing, Enrollment, and Admissions on the MPSA and BSA; developing core courses for the BSA and responsible for overall management of the BSA at the College of Professional Studies.

**Research & Evaluation Associate** [Northeastern University](http://www.northeastern.edu/) Boston, Ma **Jan,2018–July 2018** Conducting Design-based Research and data analytics (Learner Experience and Design Research team) on grant funded projects: 1) to enhance engagement and retention in online STEM courses, 2) mentoring program and 3) to broaden participation in Experiential Learning Opportunities at the College of Professional Studies.

**Lecturer** [Northeastern University](http://www.northeastern.edu/) Boston, MA **Aug,2017–Jun 2018**

Collaborating with the College of Professional Studies on crafting courses for their [Masters in Analytics](https://www.northeastern.edu/graduate/program/professional-masters-in-analytics-14859/) (MPSA); teaching Introduction to Analytics with Python, Communication and Visualization for Data Analytics with Tableau and R; mentoring MPSA students on United Nations Armed Conflict Challenge (group won challenge award 5/2018)

**Consultant** [Maguire Associates](http://www.maguireassoc.com/) Concord, MA **Jan, 2017-Jun, 2017**

Proposed a restructuring of the enrollment management dashboards solution and a new line of service (Predicting Student Performance & Retention) which would lead to a 75% reduction of yearly expenses and more visually effective dashboards; Led Machine Learning Predictive Analytics using R; Supported clients (colleges & universities) using data and analytics to achieve their enrollment goals, as well as supported the research team (survey research).

**Senior Researcher** [Wentworth Institute of Technology](http://www.wit.edu) Boston MA **Mar, 2011-Nov, 2016**

Led and used IBM SPSS Modeler to create predictive analytics models for admissions (student performance and retention) and financial aid, which saved them $1 million in the first year; Supported the Institutional Research Director on a daily basis; Collected, researched, analyzed, interpreted and reported institutional data by employing Oracle, MS SQL queries and SPSS; Managed the data warehouse project from its inception; Served as a liaison to IPEDS, US News and College Board Surveys, and contributed to project evaluation with the Director of Assessment and Accreditation.

**Web Developer** [NEPRC/Harvard Medical School](http://www.hms.harvard.edu/NEPRC/) Southborough, MA **Apr 2010-Mar 2011**

Responsible for need analysis, database design, system implementation, web development and maintenance for Pathology and Genetics; researched existing vendors, organized and evaluated vendors’ presentations of off the shelf software for pathology laboratory management, transferred File Maker Pro application into the chosen one and provided user training for it.

**Curriculum Specialist/Researcher** [USC/New Media Literacies](http://newmedialiteracies.org/) Cambridge MA  **Nov 2009-Mar 2010**

Responsible for developing on-line and off line curriculum for teacher professional development, training in-loco; and research; technical liaison between IT staff, administrators, teachers and researchers; and creating database queries for web browsers using PHP.

**Technology/Research Associate** [Education Development Center](http://main.edc.org/) Newton, MA **Jun, 2008- Oct 2009**

At the Suicide Prevention Research Center, enhanced a web based application by re-designing the database, converting from Access to MS SQL, adjusting the front end, which improved the business process at the Center by increasing productivity by 30%; added curriculum to a Drupal training module, and managed tech staff; as a Researcher at the Education, Employment & Community Programs (http://www.edc.org/stem-learning-and-research-stelar-center), co-managed the research on an educational web site for middle school age students, defining user interface requirements with the students as partners, and choosing final design layout; Achieved the goal of providing free educational web material for this age group.

**Technology in Education Consultant** [One Laptop per Child](http://www.laptop.org/) Cambridge, MA **Nov 2007-May 2008**

##### Developed and researched educational material to the XO laptop, participated in a Learning Team, supported the training of teachers and school administrators of several countries.

##### Technology in Education Consultant [Future of learning Group](http://learning.media.mit.edu/) MIT Media Lab, Brazil & Costa Rica 2001-2003

Collaborated and researchedin the creation of new alternative projects using technology and education. Helped facilitate workshops to create and support innovative learning environments including technologically enhanced rural 1-teacher schools in Costa Rica. Facilitated teacher and students training workshops in Technology and Learning for the Education Secretariat of Sao Paulo City, Curitiba, Salvador, Manaus and for schools of Fundacao Bradesco.Collaborated on the development of new learning environments for children. Developed interactive website (http://ii.media.mit.edu/) to support [the Learning Hub](http://ii.media.mit.edu/) international network using *Dreamwaver 4*. Supported the organization of the Winter Institute in Curitiba.

### Technology in Education Consultant [Seymour Papert Institute](http://www.papert.org/) Cambridge, MA Aug, 2001-Dec, 2001

### Researched and augmented a visual programming tool written in *Logo* to introduce programming concepts to pre-literate children ages 3 to 6; enhanced and added new features; trained and consulted with teachers using the software in Iowa Public Schools.

### Technology in Education Consultant *Center for Digital Culture, Mexico* Jun, 2001-Aug, 2001

### Collaborated in the project to set up the Center for Digital Culture (sponsored by Inttelmex) in Mexico City, researching, gathering educational needs of the population and helping to establish the educational technologies.

**Analyst Programmer III** MIT Student Undergraduate Dean’s Education Office Cambridge,MA **Jan, 97-Dec, 99**

Elicited user needs and requirements, analyzed and developed a Client/Server application using PowerBuilder (originally on File Maker Pro and not integrated with MITSIS) that integrated and accessed Student information in MITSIS (3 tier Client/Server application) for assigning Community Service jobs for MIT students eligible for Federal Work Study grants, which increased productivity, efficiency, and revenue. Interacted with users to create SQR report writing & Brio Query. Managed the Year 2000 Project, which included the MITSIS group, system and all nine others under the Student Undergraduate Education Office (ODSUE) umbrella.

**Analyst Programmer II** MassachusettsWater Resource AuthorityCharlestown, MA **Jan, 94-Dec, 96**

Designed and developed Oracle database management applications using Client/Server technology for Nut Island Water Treatment Plant and Fore River Pellet Plant; analyzed, designed, modeled and developed similar application for the Clinton Water Treatment Plant with secondary water treatment process; those applications increased productivity and revenue by replacing simple excel files, capturing and centralizing the data. Worked with end-users to determine needs and interfaces.

**Other Relevant Experience**

**Analyst Programmer *Calidus*,** Watertown, MA

Enhanced and wrote new modules for Sales Force Management software written in PowerHouse using Rdb.

**Software Engineer, *COELBA*,** Informatics Department**.**

Designed and developed advanced internal customer support applications. Primary work on end-user database applications, with current focus on PC Client applications in Client/Server environment. Projects included:

· Designed and developed feasibility application for personnel department for management of personnel data using Oracle v.6 and their PC application tools. First use of Oracle within the company, self-taught. Feasibility study to show benefits of migrating applications from IBM mainframe environment to Client/Server architecture.

· Tested and deployed Oracle applications for Novell network. Used OracleCard for Windows-based, graphical, hypermedia user Interface to facilitate user queries.

· Designed and developed an expert system to help electrical plant operators with fault detection and remediation using Synergia applications. Invited for cooperative project with University researchers and Petrobras. System developed in Nexpert.

· Led study and knowledge acquisition for adaptation of knowledge-based systems within COELBA. Primary focus on systems for energy transmission dispatchers.

· Test and evaluate CASE tools for PC’s. Reported to management its comparative features and benefits for adaptation and use.

· Apprenticeship with IBM as COELBA employee working on practical development of Expert Systems. Worked 9 months in Stuttgart, Germany developing expert systems in Prolog for credit analysis and hardware/software configuration. Also worked 3 months in Berlin developing real-time, graphical PC applications for computer fault diagnosis using Turbo Basic.

· Conversion of IBM Fortran program to Turbo Pascal. Developed a self-paced course for learning Turbo Pascal.

· Designed and developed large DBase-III program, later compiling with Clipper. System completely managed all computer equipment of COELBA. Provided management of location, deployment, servicing, repair, contracts, inventory, and all relevant information. Individually designed, documented and built System. Promoted from Engineer-I after qualifying examination and 6-month training course.

**Engineer I, *COELBA*,** Electric Company of the State of Bahia, Brazil.

Defined automation requirements for the Distribution department. Developed ADRS-II and Culprit applications to control the distribution equipment and registration of the electrical network.

**Programmer,** Secretary of Mines and Energy of the State of Bahia, Brazil**.**

Developed Supercalc and DBase-II applications for PC's.

**Independent Software Consultant,** Salvador, Bahia, Brazil**.**

Designed and programmed expert system to aid environmental engineers and managers. Built using Case-Based Reasoning with ART-IM and CBRExpress. Built using GUI with ToolBook. Consulted to small businesses building database applications. Worked with clients to determine needs, processes and desired results.

**Technology Skills**

**Analytics:** SPSS, SPSS Modeler, R, Python, Tableau, Qlik, Dundas, Domo, Qualtrics, Cognos Report Studio, BrioQuery, Toad

**Database Platforms:** Oracle, Oracle Forms, Access, Microsoft SQL Server Management Studio, MySql, CICS, VSAM

**Programming Languages:** PL/SQL, Microsoft Visual Studio, Java, Pascal, Basic, Visual Basic, APL, Cobol, PL/1, Fortran, dBase-xxx, FileMaker Pro, Clipper, ADRS-II, Culprit, SQR, PowerHouse, Perl, C, C ++, PowerBuilder, SQL Station, MySql, MS SQL, SilverRun, Macromedia Director 8.0, Logo, Scratch

**Expert Systems Tools:** Prolog, ToolBook, Nexpert, ART\_Enterprise, CBRexpress

**Operational Systems:** Unix, Linux, DOS, VMS, VAX

**Learning Platform:** Blackboard, Moodle, Drupal

**Web development:** MS ASP, PHP, C# and ASP NET, Word Press, Dreamweaver 4, Fireworks, Flash and Shockwave, XML, HTML, Adobe

**Project Management Software:** Basecamp

**Languages**

English, Portuguese, German and Spanish.

**Publications**

Cavallo, A. (2003). **“**An investigation into ways that cultural gender roles interfere with the learning of science and engineering”. **EuroLogo 2003** (<http://www.eurologo.org/>) Porto – Portugal.

Cavallo, A. & Couch, A. (2003). “**Researching and designing learning environments with Internet technology”** **International Conference on Multimedia and ICTs** in Education Badajoz-Spain, 2003 (<http://www.formatex.org/micte2003/acceptedabstracts.htm>).

Cavallo, A. & Couch, A. (2004). [Virtual Forum Theater: a CSCL for underprivileged children](http://web.media.mit.edu/~mello/SEMISH2004.pdf). XXXI SEMISH - **Integrated Seminar of Software and Hardware**. Salvador, Brazil. August 2004.

Cavallo, A. (2003). “**Researching and designing learning environments with internet technology”,** Poster at **XIV SBIE-Brazilian Conference of Informatics in Education** RJ-Brazil, 2003.

Cavallo, D., Blikstein, P., Sipitakiat, A., Cavallo, A. et. al. (2004). “The City that We Want: Generative Themes, Constructionist Technologies and School/Social Change.” Proceedings of the **IEEE International Conference on Advanced Learning Technologies**, ICALT’04.

Cavallo, A. (2004). [Applying Brecht’s and Boal’s Theories to Virtual Forum Theater](http://web.media.mit.edu/~mello/research.htm). Presented at the 10th Annual **Pedagogy & Theater of the Oppressed International Conference**. Omaha, USA. April, 2004

Cavallo,A., Couch, A., Chow, M., Horn, M. (2005) “Virtual Forum Theatre – A CSCL Environment for Scenario Generation and Rehearsal for Change.” Presented at **Computer Assisted Learning** – CAL’05 Virtual Learning? University of Bristol, UK, 2005.

Cavallo,A., Couch,A., Bers,M. (2007) **“Design-based research on virtual forum theatre.” Presented at Computer Assisted Learning** – CAL’07 Development, Disruption & Debate Trinity College Dublin, Ireland, 2007.

Cavallo, A. (2007). “Virtual Forum Theater: Sharing thoughts and experience online to solve conflicts.” Presented in the symposium Developmental Technologies: Positive uses of technology for youth learning and development at the *2007 Society of Research in Child Development Conference*, Boston, MA.

Cavallo,A., Couch,A. (2008). Virtual Forum Theater: collaborative playmaking to explore unjust situations In: *15th International Conference of the Association for Learning Technology - ALT-C 2008: Rethinking the Digital Divide*, 2008, Leeds.

Cavallo, A. (2010). [Chaired "Panel Digital Media Production and Social Change" and presented "Virtual Forum Theater: Creating and Sharing Drama to Resolve Conflicts" at](http://web.media.mit.edu/%7Emello/VFT/VFTMedia&Learning.ppt) [**Digital Media and Learning Conference**](http://dmlcentral.net/conference/), San Diego, February 2010.

Pollock, M., Mello, A., Kimczack, S. & al. (2011). “Building OneVille: Understanding and Improving Communication Ecosystems in Education”. Presented at Ethnography in Education Research Forum. Philadelphia, February 2011.

Saxena M., Mello, A., Kasparian, M. (2019). “Bridging the gap between competencies and assessment data: Professional, SAIL, & Outcomes”. *Conference for Advanced Learning*, Northeastern University – Boston.

Xiang, L., Mello, A., Ackerman, R. (2019). Launching a User-Generated Content Campaign to Promote PUMA’s Social Contributions. *2019 IEEE Big Data Conference*, Los Angeles-USA.

**Teaching Experience**

**Assistant Teaching Professor** [Northeastern University](http://www.cps.neu.edu/)**,** College of Professional Studies, Master in Analytics

**Lecturer** [Northeastern University](http://www.cps.neu.edu/)**,** College of Professional Studies, Master in Analytics

**Adjunct Professor** [Wentworth Institute of Technology](http://www.wit.edu/) College of Professional &Continuing Education

**Adjunct Professor** at [Bunker Hill Community College](http://www.bhcc.mass.edu/), Division of Prof Studies

**Adjunct Professor** at [MassBay Community College](http://www.massbay.edu/Academics/Science-Technology-Mathematics-Engineering/STME.aspx) STEM Department

**Adjunct Professor** at [Lesley University](http://www.lesley.edu/gsass/48calp.html) Graduate School of Arts and Social Sciences

**Research Experience**

**Researcher,** [OneVille Project](http://www.oneville.org/), Somerville Ma, Sept

**Researcher,** [South End Technology Center](http://www.tech-center-enlightentcity.tv/), Boston, MA

**Researcher**, Somerville, MA, & Salvador-Brazil**,** Maine, Thailand, Mexico, Costa Rica

**Civic and Community Service & Awards**

Research Grant from Tufts University Center for Children

US Citizenship granted in August 2008.

Member of Fayerweather Street School Board of Directors – Cambridge-Ma - 2003-2005

Member of [Community Action Agency of Somerville-CAAS](http://www.caasomerville.org/) Board of Directors – 2009-2011.

United Ideas Award on Armed Conflicts Analytics – 2018 & 2019: https://uniteideas.spigit.com/conflictanalytics/Page/ViewIdea?ideaid=1078

<https://haripery.github.io/index.html>