# Eric Farrar

Arts & Technology
School of Arts & Humanities
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# Education

THE OHIO STATE UNIVERSITY, Columbus, Ohio    2001–2004
  M.F.A., Visual Communication Design, Specialization in Digital Animation and
  Visualization, received through the Advanced Computing Center for the Arts and Design
  (ACCAD).
  Thesis: *Animation and Music: Principles for Effective Combination*

THE OHIO STATE UNIVERSITY, Columbus, Ohio    1998–2001
  Completed coursework towards a B.S. in Visual Communication Design.
  Accepted into the M.F.A. program in Digital Animation and Visualization
  after completing third year.

OHIO UNIVERSITY, Athens, Ohio    1983–1988
  B.F.A., Music Performance      Principle Instrument: Percussion

# Research Interests

3D and 2D Animation
Character Setup/Rigging
Music/Sound as a Design Element
Animation History
Narrative Storytelling

# Teaching Experience

ASSISTANT PROFESSOR
  University of Texas at Dallas, Arts & Technology (ATEC)    2009–Present
  Original courses taught include:

  *Rigging I* – This course is an introduction to the concepts, tools and techniques used in 3D
    animation for setting up clean and efficient 3D rigs that are easily able to be animated.
    Topics include hierarchical structures, joints and bones, constraints, creating useful and
    predictable deformations and setting up simple and intuitive control structures for use in
    animation.

  *Rigging II* – This course is a continuation of the Intro to Rigging course and continues with
    concepts, tools and techniques used in 3D animation for setting up clean and efficient
    3D rigs that are easily and intuitively animated.  Topics include squash & stretch
    capabilities in rigs, basic MEL scripting, dynamics, as well as some basic animation
    principles for complex rigs.

*Motion Graphics* – This course is an introduction to the concepts, tools and techniques used in motion graphic design. Students work with image, text, audio, and movement to create visual communication pieces. Topics include historical perspectives on motion design as well as the aesthetics of using movement and motion to further enhance communication. Projects are completed using Adobe Photoshop and Adobe After Effects.

*Animation Production I & II* – This course takes students through the process of producing a complete 3D animated short film from beginning to end. It is designed as a two-semester sequence, Fall and Spring semesters, in which students work on a team as a specialist in one or more areas of the animation production pipeline. Topics include Story and Concept Development, Character Design, Modeling, Texturing, Rigging, Animation, Lighting, Rendering, Compositing as well as Project Planning and Management.

*Animation Processes* – This course is an introduction to 3D computer animation for incoming ATEC students. Topics include the history of animation and specifically, computer animation; production pipelines and practices; and software applications used for animation. Students have the opportunity to explore the various disciplines within the animation production pipeline and begin to strategically plan their future courses within the ATEC curriculum.

Other pre-existing courses taught include:

*3D Modeling for Computer Animation* – This course is an in-depth examination of basic modeling principles and techniques. Students focus on creating hard surface models using polygonal geometry as well as NURBS geometry. An in-depth examination of Maya 3D animation software is also covered. This course is the "gateway" course for ATEC students considering paths in 3D animation or game development.

*3D Lighting and Texturing* – This course is an in-depth examination of lighting and texturing fundamentals and techniques for use in computer generated art. Areas of study include UV unwrapping, texture mapping, texture painting, global illumination, Mental Ray and more.

ASSISTANT PROFESSOR
   Ohio University, School of Media Arts and Studies    2008–2009

VISITING PROFESSIONAL, Computer Animation
   Ohio University, School of Media Arts and Studies    2006–2008
   Designed and taught animation related courses in the Digital Media: Special Effects, Games and Animation (DM:SEGA) sequence. Courses taught include:

*Introduction to Digital Media Production* – This course presents fundamental principles of digital design and introduces students to some of the primary tools used for image manipulation and creation such as Photoshop and Flash. Interactivity and simple animation concepts are introduced as well.

*Introduction to Computer Animation* – An introduction to the basic principles of timing and motion through the production of 2D animation. Projects are completed using Adobe After Effects.

*3D Modeling and Animation I and II* – An introduction to the basic principles
of 3D computer modeling and animation. The first course is an introduction
to the 3D environment and an overview of 3D modeling and texturing
techniques while the second course introduces lighting, rigging and simple animation.
Projects are completed using Maya.

*Animation Industry Survey* – This course examines the art of animation and
the technologies and industries that have developed around it. It explores
the history of the art, economics and structure of the industries, creative
processes and business practices as well as providing an overview of
careers and skills required for those interested in entering the industry.

LECTURER
The Ohio State University   1999–2000
Taught introductory Computer Science course for business students. The course covered
basic problem solving techniques using Microsoft Office productivity
tools as well as a brief introduction to writing basic HTML.

# Creative Work

*RIGGER 'REET*    2011–Present

Currently designing and building advanced character rigs for this animated short film written
and directed by ATEC Assistant Professor Todd Fechter. Planned for completion SPRING of
2013.

*BREAKING NEWS: THE COLLISION OF JOURNALISM AND CONSUMERISM IN A
DEMOCRACY*   2007–2008

Designed and produced informational motion graphics for this documentary written and
directed by Eric Williams, Assistant Professor, at the Ohio University School of Media Arts
and Studies. The film examines the complex interactions between a free press and
consumerism in the emerging democracy of Ukraine following their Orange Revolution.
Collaborated with Beth Novak, Assistant Professor in the School of Media Arts and Studies,
to create a series of moving map sequences, charts, title graphics and bottom third
information for this documentary.

*THE LAST PIECE*    August 2008

Co-edited and created title graphics for this short film created as part of the 2008 48-Hour
Film Competition held in Columbus, Ohio. The film won Best Musical Score and Best Use of
Columbus Landmark and received Honorable Mention for Best Editing, Best
Cinematography and Best Use of Character.

*SPRIRAL BOUND*    September 2007

Created visual effects for this short film created as part of the 2007 48-Hour Film Project held
in Cleveland, Ohio. The film won Best Use of Prop for its depiction of a notebook whose
pages "magically" displayed written text to help its absent-minded owner find misplaced
items.

INTERACTIVE FIREFIGHTER TRAINING SIMULATION    2006–2007

Ohio University's Game Research and Interactive Design (GRID) Lab was commissioned by
Owens Community College to develop this a proof-of-concept, augmented-reality game for

firefighter trainees. Trainees were introduced to a variety of fire fighting scenarios through the use of a virtual game environment. Provided 3D modeling and character rigging services to the developers at the GRID Lab for a number of assets used in the game which included the following:

    a. 3D bed model with textures
    b. 3D fire hydrant model with textures
    c. Complete body rig (movable joints and controls systems) for a virtual firefighter character
    d. Complete body rigs (movable joints and control systems) for two virtual victim characters.

# Professional Experience

CHARACTER RIGGING TECHNICAL DIRECTOR
Rhythm & Hues Studios, Inc., Los Angeles, California     2004–2006

Incorporated skeletal and muscle systems (rigging) into 3D character models so they could be animated. Created systems for clean deformations as well as intuitive and efficient animation controls. Oversaw and supported use of character rigs through the animation pipeline. Set up dynamic cloth, hair and fur simulations. Wrote custom scripts to help optimize workflow procedures. Characters ranged from simple bipedal characters to complex quadrupedal animals as well as highly detailed and realistic facial rigs. Major projects included:

*Night at the Museum*
    Character setup and rigging

*Cox Communication: Commercial TV Spots*
    Character setup and rigging
    Cloth and fur dynamic simulation

*The Chronicles of Narnia: The Lion, the Witch, and the Wardrobe*
    Character setup and rigging

OWNER/PRINCIPAL
Solid Tone Productions     1997–1999

Designed and developed custom websites for commercial clients. Services ranged from HTML and JavaScript coding, to custom graphics and electronic commerce functionality.

DRUMMER/PERCUSSIONIST
Columbus and Central Ohio, Freelance     1988–1998

Performed as a professional freelance drummer/percussionist for a number of different musical performing and recording groups including The Springfield Symphony Orchestra, Springfield, Ohio, singer/songwriter Donna Mogavero, and jazz pianists Chris Young and Scott Steelman.

# Professional Memberships

Association of Computing Machinery, SIGGRAPH
International Society for the Arts, Sciences and Technology
Association International du Film d'Animation – ASIFA Hollywood

# Achievements in Original Achievement, Investigation, and Research

WORK IN PROGRESS
Visible Speech System, Callier Center for Communication Disorders
Developing a system that captures real time tongue movement and maps the data to a 3D tongue model to visualize human speech. The system utilizes the 'Wave Speech System' from NDI which uses an electromagnetic non line-of-sight motion capture system, designed specifically for speech research. This research project ports the data from the WAVE system into Autodesk's 'Motion Builder'. The goal of the project is to use the 3D models to provide visual feedback for patients with speech disorders.  The system is being designed to be flexible for use various fields ranging from clinical rehabilitation to foreign language learning.

# Professional and University Citizenship

Arts & Technology Curriculum Committee

Arts & Humanities Executive Committee
    ATEC Representative

Bryce Jordan Scholarship Committee
    ATEC Representative

Arts & Humanities Scholarship Committee
    ATEC Representative

Animation Faculty Search Committee

Digital Design Faculty Search Committee
    Committee Chair

Animation Guild – ATEC Student Animation Group
    Faculty Co-advisor

The Institute for Innovation & Entrepreneurship (IIE)
    School of Art & Humanities Representative