ANDREY CHEN

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1. EDUCATION

I. University of Utah (Salt Lake City, UT 84102)
Master of Entertainment Arts & Engineering, 2020 – 2022
Cumulative GPA: 3.93

Design Coursework: Game Design, Rapid Prototyping, Technical Art I/II/III/IV, Level Design, Game Projects I/II, Environmental Art for Games, Advanced Game Studio II, Independent Study

II. Westminster College (Salt Lake City, UT 84101)
Bachelor of Science in Chemistry and Physics (Double Major), 2013 – 2017
Applied Mathematics Minor
Cumulative GPA: 3.635
Dean's List: 2013 – 2017

Science Coursework: Physical Chemistry I/II, Quantitative Analysis, Instrumental Analysis, Inorganic Chemistry, Organic Chemistry I/II, Principles of Chemistry I/II, Forensic Sciences, Electrodynamics, Thermodynamics and Statistical Mechanics, Quantum Physics, Electronics and Electric Circuits, Analytical Mechanics, Modern Physics, Mathematical Methods of Physics, Physics for Scientists and Engineers I/II

Mathematics & Computer Science Coursework: Scientific Computing, Linear Algebra, Multivariate Calculus, Calculus I/II, Topics in Applied Mathematics, Interdisciplinary Approach to Poker, Discrete Mathematics, Bayesian Data Analysis, Statistics for the Sciences

2. SKILLS

Technical Art: Materials & Shaders, Blueprints, PCG & Procedural Generation, Geometry Scripting, VEX, SOPs, Python Tooling (Maya / Unreal), Shader Graph (Unity), Physics-Based Systems, Sequencer & Cinematics, Profiling (RenderDoc, Unreal Insights)

Lighting: Lumen, Cinematic Lighting, Interior & Exterior Lighting, Mobile VR Lighting, Mixed-Reality Passthrough Blending, Rendering & Solaris / LOPs, Lighting Optimization

VFX: Niagara, POP / Particle Systems, Dynamics & Simulations (DOPs / Solvers), Shader-Driven Effects, VFX Optimization

3D Art: Hard-Surface & Organic Modeling, High-to-Low Poly Baking, Nanite Workflows, Streaming Virtual Texturing, Texturing, Environment Art, Props & Hero Assets, Blockouts

Software: Unreal Engine 5, Unity, Houdini, Maya, Blender, ZBrush, Substance Painter, Substance Designer, SpeedTree, Photoshop, Premiere Pro, After Effects, Perforce, Git, Jira

Production: Art Direction, Team Leadership (10+), Multimedia Gameplay Production, Agile Project Management, Client & Stakeholder Communication, Rapid Prototyping, Playtesting, XR Design (VR / AR / MR)

Teaching & Research: Curriculum & Course Material Development, Lab & Studio Instruction, Active Learning, Assessment & Grading, Student Mentoring & Advising, Industry-Aligned Pipeline Instruction, Interdisciplinary STEM & Art Teaching, Research & Conference Presentation, STEM Outreach, Committee Service

3. RESEARCH EXPERIENCE

i. **Johnston Research Group**, Westminster College. 2016 – 2017.
- Conducted computational thermodynamic research using Gaussian through the University of Utah's Center for High Performance Computing to model the dissociation of protonated methionine in collaboration with Dr. Peter B. Armentrout.
- Discovered several loss mechanisms of NH3 and CO/H2O from protonated methionine by performing potential energy scans, geometry optimizations, transition state calculations, intrinsic reaction coordinate calculations, and single point energy calculations.

4. PRESENTATIONS

i. **American Chemical Society National Conference**, San Francisco, Westminster College. March 2017.
Poster presentation of computational thermodynamic research on NH3 and CO/H2O loss mechanisms of protonated methionine molecule.

ii. **Undergraduate Geek Fest,** Salt Lake City, Westminster College. September 2017.
Oral presentation of the fragmentation of ammonia through an SN2 reaction of protonated methionine.

iii. **American Chemical Society**, San Diego, Westminster College. Spring 2016.
Poster presentation of activities and internal structure of the club.

iv. **Analytical Chemistry Showcase**, Salt Lake City, Westminster College. Fall 2015.
Poster presentation of carcinogenic heavy metal concentrations in major brand tobacco products and effectiveness of filters on reducing the contents in passthrough smoke.

5. HONORS & AWARDS

2026 **The Superman Experience** – Official editorial feature: "A remarkable recreation of Superman's Fortress of Solitude… Believe me, there's plenty to see and do within it!" — Joseph McCabe, DC.com.

2022 **Among Us VR** – Developer on the award-winning VR title (The Unity Awards – Best AR/VR Game Winner, The Game Awards 2022 – Nominee). Schell Games.

2016 – 2017 **The First "Safe Haven" Institution in Utah** – Spearheaded the initiative to declare Westminster College as the first "Safe Haven" institution in the state of Utah, providing an unwavering support to Undocumented and DACA-mented students. Westminster College.

2017 **American Chemical Society National Conference, San Francisco** – Poster presentation of computational thermodynamic research on NH3 and CO/H2O loss mechanisms of protonated methionine molecule. Westminster College. Honorable mention (top 15%).

2017 **Mathematical Contest in Modeling** – Optimized a passenger throughput at an airport security checkpoint using R and Excel. Honorable mention (top 10%). Westminster College.

2016 – 2017 **Associated Students of Westminster Presidential Award** – Granted for the service to school in the role of student government Vice President and enriching a sustainable community within the university ecosystem. Westminster College

2017 **Westminster Summer Undergraduate Research Grant** ($3,500). Westminster College.

2013 – 2017 **Education USA Fellowship** ($80,000). Westminster College.

6. PROFESSIONAL EXPERIENCE

i. **Advanced Artist** (also Multimedia Gameplay Producer), Schell Games. October 2024 – December 2026.
- Served as the studio's in-house lighting specialist, leading lighting development across 12+ projects while balancing visual quality with hardware-specific optimization and real-time performance requirements.
- Led production oversight across multiple multidisciplinary teams of 10+ developers, managing project scope, resource allocation, schedules, and budgets for location-based entertainment and international theme park experiences.
- Created custom materials/shaders and procedural tools utilizing Unreal Engine 5's procedural generation tool and geometry scripting. Employed Maya and coding in Python to facilitate development process, set up physics-based systems and assist 3D artists and game designers in blockout creation.

ii. **Game Artist**, Schell Games. September 2022 – September 2024.
- Created 3D hard surface and organic environments for Among Us VR: Polus Point (Unity), and subsequently lit the scenes with an eye for optimized mobile VR gameplay.
- Employed modular and procedural art creation pipelines in order to streamline the game production.
- Responsible for optimizing lighting, asset blending into the real-life physical spaces and art assets performance optimization on two cutting-edge unannounced MR projects (Unreal).

iii. **Technical & Lighting Artist**, Synodic Arc. August 2022 – September 2022.
- Responsible for modeling, texturing and implementation of population assets using a high-to-low poly pipeline while adhering to the established game aesthetics.
- Worked on relighting game environments and optimized lighting setups.

iv. **Technical Artist & UI/UX Designer**, GApp Laboratory, University of Utah. May 2021 – April 2022.
- Responsible for visual rebranding of UI/UX of all Virtual Social Work Trainer applications.
- Created promotional materials (including marketing documentation) and reimagined logos to ensure the brand consistency.
- Introduced templates and generated tools for animations and in-game transitions.

v. **Lead Lighting & Environment Artist**, University of Utah. August 2021 – April 2022.
- Responsible for general art direction and style of the environmental art on two published games (Sword of Atlas, La Villa De La Muerte – Steam); sole 3D artist on Sword of Atlas.
- Created dynamic interior and exterior lighting for all environments, optimized lighting setups for frame rate purposes and troubleshot lighting issues in the level streaming.

vi. **Laboratory Technician**, Myriad Genetics. September 2017 – September 2019.
- Performed specimen processing and identified the reason for outlier data assuring the accuracy of patient test results.
- Established a procedure that ensured timely maintenance of medical equipment, which increased productivity while decreasing repair expenses.
- Designated to onboard and train new employees.
- Served as a mediator between multiple laboratory departments.

vii. **Laboratory Technician**, Westminster College. October 2013 – September 2016.
- Provided technical support to faculty, staff, and students in operating the laboratory instrumentation.
- Maintained various spectroscopy instrumentation and laboratory spaces in accordance with federal safety guidelines.
- Oversaw chemical/biohazard waste disposal and performed chemical and equipment inventory checks on weekly basis.

7. SERVICE

i. **Vice President**, Associate Students of Westminster, Westminster College. 2016 – 2017.
- Successfully lobbied for establishing Westminster College as the first "Safe Haven" institution in Utah, providing protected environment for undocumented students.
- Oversaw a budget of $200,000.
- Outlined and set new goals for the student body during the college-wide rebranding initiative.
- Led the sustainability Eco-Council and personally managed a $12,000/yr budget dedicated to student projects.
- Served as the student body representative on the Advancement Board of Trustees Committee. Served as the student body representative responsible for Alumni relations and furthering goals of the Career Center.

ii. **American Chemical Society Board of Directors**, American Chemical Society of Westminster, Westminster College. 2014 – 2016.
- Organized and managed a total of 8 college sponsored events on- and off- campus throughout each academic year, designed to introduce students from middle and high schools to the field of STEM.
- Provided various volunteering opportunities for Westminster students, oversaw a team of dozen students per project.

8. TEACHING & MENTORING EXPERIENCE

i. **Asset Pipeline Teaching Assistant**, University of Utah. January 2021 – August 2021.
- Updated course materials, led laboratory sessions, held office hours, graded all homework.

ii. **Alumni Mentoring Program**, Westminster College. August 2020 – May 2021.
- Provided networking opportunities and mentoring services for a senior student looking to break into the industry.

iii. **Organic Chemistry Teaching Assistant**, University of Utah. September 2020 – December 2020.
- Led active learning sessions and graded all homework assignments.

iv. **Gear UP Classroom Mentor**, East High School. September 2019 – July 2020.
- Provided tutoring and mentoring services along with college preparation advisement for high school students.

v. **Physical Chemistry Teaching Assistant**, Westminster College. August 2016 – May 2017.
- Graded all homework assignments, updated course materials and provided classroom support during two semesters of Physical Chemistry course.

vi. **Arts Instructor**, Arts Bridge Program, Lincoln School. September 2014 – May 2015.
- Taught kids of various ages the basics of art techniques.
- Instructed a class in creation of an art installation for a local school play.

vii. **Arts Instructor**, Arts Bridge Program, Mountain View Elementary School. January 2014 – May 2014.
- Created an engaging curriculum for a class of 4th graders with an emphasis on learning basic sciences and arts principles through a graphic novel creation.