

Kristina Gu

Computer Science &
Engineering Management

GPA: 3.66

Portfolio

kristinagu.com

Contact

- kcg23@gmail.com
- (703) 568-0307
- 11286 Stones Throw Dr.
Reston, VA 20194

Awards

Scholastic Art & Writing Awards

- 1 Silver Medal (national award), 3 gold keys, 1 silver key, 5 honorary mentions
- Awards given for writing in the categories of Science Fiction/Fantasy, Short Story, and Personal Essay/Memoir

National Merit Scholarship Semifinalist

Dean's List (at Cornell University)

Skills

Technical

- Python, Java, OCaml, Javascript, C++
- Unix/Linux, Git

Statistics & Data Analysis

- Matlab, R

Design

- Adobe Illustrator, HTML/CSS

Game Development

- Unreal Engine: Blueprints, C++, gameplay programming, behavior trees

Writing

- Technical, academic, and creative
- Writing samples included in portfolio

Interests

- Dungeons & Dragons 5e (DM, and I design my own homebrew mechanics)
- Gaming: RPGs, stealth, action

Education

Cornell University — M.Eng. Engineering Management

2021 — 2022

- Expected graduation: May 2022

Cornell University — B.S. Computer Science

2018 — 2021

- Major: Computer Science, expected graduation: December 2021
- Dean's List
- Research Assistant in Dept. of Computer Graphics under Professor Donald Greenberg

Relevant Coursework:

- Object-Oriented Programming & Data Structures, Discrete Structures, Data Structures & Functional Programming, Linear Algebra, Visual Imaging in the Electronic Age, Systems Programming, Foundations of AI, AI Practicum, C++ Programming, Computer Graphics I, Intro Analysis of Algorithms, Intro Game Architecture, Communication in Game Development, Intro to Computer Networks, UNIX Tools and Scripting

Experience

Systems Design Intern — SIE Bend Studio

Jun 2021 — Sep 2021

- Proposed and then developed gameplay system prototype for player-programmable companions in a third-person action game
- Designed simplified programming language and built runtime interpreter for it in UE4
- Participated in pitch meetings to design gameplay systems for multiplayer, economy, crafting, and Games as a Service (GaaS)

Gameplay Programmer & Story Designer — Astral Clocktower Studios

Aug 2020 — Dec 2020

- Developed and managed bug tracking system for QA team using Jira
- Designed aspects of narrative in the game, including overarching plot, side quests, dialogue, and lore found from in-game discoverables
- Assisted with designing combat mechanics and unique behaviors for different enemies

Technical Analyst Intern — Synergy

Jun 2020 — Jul 2020

- Worked as part of agile development team, conducting requirements analysis to integrate third-party module into an existing United States Coast Guard system
- Assisted in writing documentation and in review and analysis of .NET/WPF code base

Research Assistant — Cornell Department of Computer Graphics

Jan 2020 — Jul 2020

- Worked under Professor Donald Greenberg on projects involving virtual reality (VR)
- Wrote 20+ page report studying edge enhancement and its effect on dynamic range for computer-generated scenes, for intended application in VR

Essay Review Consultant — CollegeVine

Nov 2018 — Jan 2019

- Reviewed an average of 25 application essays a week, providing suggested revisions and feedback reports

Technical Consulting Intern — Jochum, Shore, & Trossevin PC

Jun 2017 — Aug 2017

- Assisted in developing marketing strategy and press kit for Infosci (data security start-up)
- Conducted research on AI in agriculture, wrote memoranda to prepare team members for relevant policy hearings
- Represented firm at MS-13/UACs Senate hearing and provided reports to client