

# Rishi Pandey

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## EDUCATION

**University of Illinois Urbana Champaign** | *Champaign, IL* May 2021  
Bachelor of Science, Major: Industrial Engineering, Minor: Computer Science GPA: 3.24

**Universidad Pontificia Comillas** | *Madrid, Spain* Jan 2019 - May 2019  
Engineering Semester Abroad

## SKILLS

*Technical:* C++, Python, Unreal Engine, OpenGL, GLSL, HLSL, Shotgun, PyQt/PySide, OpenCV, Unity, ARKit, Flask  
*Language:* Spanish, Hindi

## EXPERIENCE

**i-Jet Lab (Brunswick Corporation)** | *Champaign, IL* May 2020 - Present  
*VR/AR Engineering Intern*

- Created a custom pipeline for importing Rhino CAD designs into Unreal Engine by extending Datasmith using Python
- Engineered demo virtual reality visualization tool for Brunswick's boating products built in Unreal Engine and C++
- Integrated and scripted custom HLSL shaders for visualization tools and to develop a unique cinematic style for VR

**Zero VFX** | *Chicago, IL* May 2019 - Sept 2019  
*Pipeline Technology Intern*

- Developed tools to assist in feature film pipeline integration, specifically between Shotgun and Photoshop
- Experimented in Unreal to learn how real-time rendering impacts virtual production filmmaking and visual effects
- Assisted in managing matte-painting artist requests for visual effects software using Python and pipeline toolkits

**Fiserv** | *Chicago, IL* May 2019 - Aug 2019  
*IT Architecture Intern*

- Built full-stack status system for data reporting automation by utilizing Python and SQL database technologies
- Helped set up big data architecture for elegant solutions to financial data management using cutting edge techniques
- Collaborated with the data engineering team to incorporate efficient real-time analysis

**NetMath** | *Champaign, IL* Jan 2018 - Nov 2018  
*3D Math Mentor*

- Mentored students studying university-level multivariable calculus using Mathematica and Matlab tools
- Automated processes for efficient grading on a 3D Math e-learning platform using Python web frameworks
- Encouraged student collaboration and created a positive learning environment for a diverse student body

**CS 125** | *Champaign, IL* Aug 2018 - Dec 2018  
*Java Course Assistant*

- Created Android applications to teach students how to create user interfaces and develop code for mobile platforms
- Guided computer science students in learning to construct efficient algorithms in Java
- Supervised office hours in order to prioritize students that required individualized attention

## ACTIVITIES

**Personal Projects** | *Champaign, IL* Jan 2018 - Present

- Designed environments, lighting, and custom tools for a virtual production animated short film in Unreal Engine
- Leveraged computer vision to create a pose-estimation algorithm to help find a mobile solution to motion capture
- Developed a ray tracer in C++ implementing multiple materials and a basic cinematography system

**Siggraph** | *Champaign, IL* Aug 2020 - Aug 2020  
*Student Volunteer*