#### Contact

www.linkedin.com/in/ arungangadhargudurrao (LinkedIn)

### Top Skills

Computer Animation

**APIs** 

Game Development

#### Certifications

Microsoft Global Hackathon 2021

Microservices Foundations

Cloud Native Twelve-Factor Applications

Learning Amazon Web Services (AWS) for Developers

# Arun Gangadhar Rao

Senior Engineering Manager at k-ID

Bothell, Washington, United States

## Experience

#### k-ID

Senior Software Engineering Manager September 2024 - Present (3 months)

**United States** 

#### **SHRAPNEL**

2 years 10 months

Head of Creator Foundry
May 2023 - September 2024 (1 year 5 months)

Seattle, Washington, United States

#### **Technical Director**

December 2021 - June 2023 (1 year 7 months)

Seattle, Washington, United States

#### Microsoft

Senior Software Development Engineer April 2020 - December 2021 (1 year 9 months)

Redmond, Washington, United States

Azure Playfab

oneZero Financial Systems
Senior Software Development Engineer
June 2019 - April 2020 (11 months)

Bellevue, WA

#### Microsoft

Senior Software Development Engineer October 2013 - June 2019 (5 years 9 months)

Redmond, Washington

#### Shipped Titles:

- \* Ori and the Will of the Wisps Dev Lead
- \* Crackdown 3 Wrecking Zone Individual Contributor
- \* Sunset Overdrive (Win10 Store / Steam) Dev Lead
- \* ReCore (XB1 / Win10 Store / Steam) Dev Lead

\* Sunset Overdrive (XB1) - Al Programmer

HERE, a Nokia business Senior Engineer January 2013 - October 2013 (10 months)

Irrational Games
AI & Gameplay Programmer
June 2010 - December 2012 (2 years 7 months)

Title: Bioshock Infinite

- \* Worked with modified version of Unreal Engine 3.
- \* Developed Elizabeth's non-combat and combat behaviors, as well as support systems.
- \* Implemented AI behaviors and other support code for designers to create AI characters.
- \* Implemented modifiers for AI pathfinding using Autodesk's Kynapse middleware.
- \* Implemented Handyman initial behaviors and prototyped his dynamic jumping.
- \* Supported Level Designers and Animators with feature requests.
- \* Used Natural Motion's Morpheme animation system to manage animation states.

High Voltage Software Software Engineer March 2007 - June 2010 (3 years 4 months)

**Shipped Titles** 

The Conduit (Nintendo Wii) - 2009

- From ground up, integrated Nintendo's libraries into the networking technology
- Managed Nintendo Online requirements
- Implemented gameplay for online multiplayer game modes
- Worked with designers to architect a system to support online gameplay

High Voltage Hot Rod Show (Nintendo Wii - WiiWare) - 2008

- Helped support development of downloadable Nintendo Title
- Created interfaces for online leaderboards

FlameSim (PC) - 2007 - 2008

- Ported networking technology from other platforms to enable networked play sessions
- Integrated ported technology into user interfaces
- Maintained networking support for development of play sessions

America's Army: True Soldiers (XBOX 360) - 2006

- Managed Microsoft Xbox LIVE requirements
- Performed most of the duties required to pass networking certification requirements
- Implemented networking based communication features for gameplay

#### **Unreleased Titles**

Unannounced Next-Gen Project (XBOX 360, PC, PS3)

- Lead development of new A.I. technology for improved gameplay
- Supported technical designers in development of engaging levels and A.I.
- Created tools to enable designers to develop and customize A.I. characters

#### Unannounced Wii Shooter

- Implemented new technology to improve I/O systems, allowing larger game worlds
- Provided support and development tools to improve development iteration times

Unreleased title based on TV Series (XBOX 360, PC, Nintendo Wii) - 2007

- · Development of an adventure game
- Developed an dynamic, robust, user friendly camera system
- Managed character behavior based on player input when traversing the game world
- Created systems to quickly create interactive objects
- Made improvements with the internal technology being used, alongside the Advanced Technology Group.

#### NVIDIA

Software Intern

October 2006 - January 2007 (4 months)

Worked in handheld dept.

- Fixed bugs in GPU and Applications Processor (AP) drivers
- Implemented hardware accelerated blitting
- Performed fuzzy comparison of gold images to validate accuracy
- Implemented test programs

- Updated automated test scripts to easily add more units to run test programs in parallel

Electronic Visualization Laboratory at Univ. of Illinois at Chicago Research Assistant
January 2003 - August 2006 (3 years 8 months)
Bibliography:

Krishnaprasad, N., Vishwanath, V., Venkataraman, S., Rao, A., Renambot, L., Leigh, J., Johnson, A., , JuxtaView – a Tool for Interactive Visualization of Large Imagery on Scalable Tiled Displays, Proceedings of IEEE Cluster 2004, San Diego, CA, 09/20/2004

Renambot, L., Rao, A., Singh, R., Jeong, B., Krishnaprasad, N., Vishwanath, V., Chandrasekhar, V., Schwarz, N., Spale, A., Zhang, C., Goldman, G., Leigh, J., Johnson, A., SAGE: the Scalable Adaptive Graphics Environment, Proceedings of WACE 2004, 09/23/2004

Rao, A., Kamp, B., Noren, A., Ito, E., Schnurrenberger, D., Morin, P., Leigh, J., Rack, F., Johnson, A., Renambot, L., CoreWall: A Visualization Environment for the Analysis of Lake and Ocean Cores, Geological Society of America Abstracts with Program, Denver, Colorado, 36, 5, 273, 12/12/2004

Rao, A., Rack, F., Kamp, B., Fils, D., Ito, E., Morin, P., Higgins, S., Leigh, J., Johnson, A., Renambot, L., CoreWall: A Scalable Interactive Tool for Visual Core Description, Data Visualization, and Stratigraphic Correlation, Eos Trans. AGU,86(52), Fall Meet. Suppl., San Francisco, CA, 12/05/2005

Krumbholz, C., Kooima, R., Rao, A., Tangible User Interface Testing on the LambdaTable: A High Resolution Tiled LCD Tabletop, EVL Technical Paper Publication, 20060721\_krumbholz, 07/01/2006

Rao, A., Chen, Y., Lee, S., Leigh, J., Johnson, A., Renambot, L., Corelyzer: Scalable Geologic Core Visualization using OSX, Java and OpenGL, Apple's Worldwide Developers Conference 2006, 07/08/2006

## Education

University of Illinois Chicago Masters, Computer Science · (2003 - 2006)