

# Sahil Ramani

SENIOR SOFTWARE ENGINEER · MACHINE LEARNING & GRAPHICS

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## Summary

With over 12 years of software development experience, including 4 years specializing in machine learning, I am an accomplished software developer with a proven track record of leading small teams focused on R&D projects. My expertise lies in building tools that harness the power of machine learning to empower users and unlock their creativity. I am driven by my passion for delivering software that provide high-quality results with minimal user effort, and I am always on the lookout for projects that make a positive impact on consumers' lives.

## Skills



## Work Experience

### Unity Technologies

Seattle, WA, USA

SENIOR SOFTWARE ENGINEER / SOFTWARE ENGINEERING MANAGER

Aug. 2019 - Present

- Build and productionize state of the art tools that use Machine Learning to simplify the task of creating large worlds in games.
- Managed a small team of engineers that explored the possibility space of improving lighting & rendering in games using Machine Learning.
- **Patent Pending** : System and Method for Interactive Asynchronous Tile-Based Terrain Generation

### Crystal Dynamics

Redwood City, CA, USA

ENGINE LEAD, FUTURE PROJECTS / SENIOR SOFTWARE ENGINEER / SOFTWARE ENGINEER

Nov 2014 - Aug 2019

- Led a team of engineers developing technology for the future of games at Crystal Dynamics.
- Improved editor performance by over 20x in 2 years, and tool rendering performance by 2x.
- Retrofitted multi threading into the editor and added support for editor scripting in python.
- Developed a solution to support multiple users working in the same game-world location.
- **Patent #11189068** : Macro-based electronic map editing.

### Dreamworks Dedicated Unit

Bengaluru, Karnataka, India

SOFTWARE APPLICATIONS ENGINEER, ANIMATION & RIGGING TOOLS

Mar 2013 - Oct 2014

- With the R&D team, developed the award-winning animation and rigging tools for DreamWorks Animation.
- Improved design of cache handling and paging to improve editor performance.
- Prototyped high-performance memory models for the next generation rigging tools.

### Microsoft Corporation

Redmond, WA, USA

SOFTWARE DEVELOPMENT ENGINEER IN TEST, XBOX GRAPHICS

July 2011 - Oct 2012

- Improved low-level DirectX 11 and 11.1 API, shader and texture tiling test framework.
- Eliminated over 2500 issues with the existing test suite implementation. Collaborated with other teams to import tests from other frameworks into custom test suite.
- Implemented an automated process controller debugger to detect and recover from catastrophic failures.

### Nokia Research Center

Santa Monica, CA, USA

RESEARCH INTERN, MOBILE EXPERIENCES

May 2012 - July 2012

### Yahoo! Software Development India

Bengaluru, Karnataka, India

SENIOR SYSTEMS ENGINEER / SYSTEMS ENGINEER

July 2006 - July 2009

## Education

### Nanodegree, AI For Trading

Online

UDACITY

Jun 2021 - May 2022

### Nanodegree, Deep Learning

Online

UDACITY

Jun 2020 - Oct 2020

### Masters of Science in Computer Science, Game Development

Los Angeles, CA, USA

UNIVERSITY OF SOUTHERN CALIFORNIA

Aug 2009 - May 2011

### Bachelor of Engineering, Computer Science

Bengaluru, Karnataka, India

BMS COLLEGE OF ENGINEERING

Aug 2002 - June 2006