Khushman J. Patel

Mumbai, Maharashtra, India

(+91) 7506986816 | khushman1@gmail.com | www.khushmanpatel.com | khushman1 | khushman-patel | khushman1

"Virtual reality is the first step in a grand adventure into the landscape of the imagination."

Experience

Housing.com
Mumbai, India

Tech Lead, Virtual Reality
Mar. 2015 - Present

- VR exploration
    - Engineered Housing's VR product from scratch as an individual contributor, driving 0-1 product development without any tech/product leadership.
    - Designed intensive usability testing programs; experimented with every facet of design and tech to deliver a state-of-the-art result.
    - Set up a VR team of driven designers, and developers, leading them through continuous innovation.

- Automated VR creator for interior models
    - Drove scalable production through a multi-layer system, seamlessly connecting the browser to Unity. Coupled with a model maker, cut down delivery times from months to hours.
    - Developed and maintained the backend, which tied into the Housing's vast database, enhancing the visual experience with contextual information.

Software Developer
Dec. 2014 - Mar. 2015

- Routing System
    - Built the routing system for Housing's map interface. Features like multi-transit isoline generation were efficiently designed for response times <200ms.
    - Scaled to thousands of concurrent users, tested in production after driving traffic through a conversion rate of 60%.

- Polygon crawler
    - Designed an efficient polygon and fid/address crawler for cities from Google's Mapmaker.
    - Accelerated city addition by automation instead of manual data entry, scaling lead time 3x.

Cisco Systems
Pune, India

Software Engineer
Aug. 2013 - Dec. 2014

- Contributed to the SGW+PGW nodes in the LTE architecture. Gained an in-depth understanding of high-scale, low-level C code, following stellar software engineering practices including AGILE, peer reviews and version control.
- Delivered a graphical network debugger as a solo project. Using Cisco's monitor protocol, it mapped inter-node communication. Reduced debugging times to hours from days, and found long-standing undiscovered bugs.

Cisco Systems
Pune, India

Software Engineer Intern
Jan. 2013 - Jun. 2013

- Completed a partial simulator for the SAEGW(SGW+PGW) node, and extended it into an automation framework.
- Scripted automated unit and integrated testing for every release, helping subsequent releases become much faster by reducing QA load.

Education

IIIT Allahabad
Allahabad, UP, India

B. Tech. in Information Technology
Jul. 2009 - Jun. 2013

- Founding secretary of the technical club, entrusted with the college network, servers, and innovating new services.
- Published in an IEEE Conference: Patel, Khushman, et al. "Lazy Wavelet Transform Based Steganography in Video." Communication Systems and Network Technologies (CSNT), 2013 International Conference on. IEEE, 2013.

Skills

Programming	Python, C, C++, QT, Unity3D C#, Bash shell, Android Java, LaTeX
Web Tech.	Ruby on Rails, HTML5, nginx, PostgreSQL, PostGIS, Pg-routing, Polygons
Software Engg.	Agile development, Scrum, Git, Peer reviews
Leadership	Led a team of 5 people to continuously innovate on one of India's first VR products despite an unfavourable environment of company-wide restructuring and mass layoffs.

Extracurricular Activities

VRoom
Hackathon, Mumbai

Programmer
16 - 17 Oct. 2015

- Envisioned, and coded a VR auto room decorator, involving preset furnitures and space calculations.
- Encoded 11 primary rules of interior decorating to allow proper automated placement of interiors.
- Added an interior randomizer function, allowing quick glances to the possibilities of the room.

WinLoris
Mumbai

Programmer
May 2013

- Coded a family member of the infamous loris family of tools that used TCP half-open connections to compromise Apache servers.
- Was used by Anyonymous during OpIndia, helping a beginner get started with a minimal learning curve.

Blog

Writer/Tech

- Hobbyist poet and writer
- http://khushmanpatel.com/blog

- Time Person of the Year 2006