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EMPLOYMENT

Software Dev Engineer II	**Orbitz Worldwide (Expedia)**	**Jan 2016 – Present**

Vacation Rental content

• Working on design and development of strategies to create a one stop shop for vacation rentals and hotels on the Expedia platform.

• Enhance the consumer experience by displaying most relevant and usable content for vacation rentals

• Increase the inventory of properties available by enhancing the onboarding process for lodging providers

Software Engineer II	**Orbitz Worldwide**	**March 2015 – Dec 2015**

Micro-services and Search data pipeline

• As a part of a group wide effort to break up the main application of our 'flex framework' (used to create SEO landing pages) into smaller components, I designed, developed and deployed to production several restful microservices. These microservices were a part of a larger service oriented stack, where each microservice built a part of the landing page. These were eventually stitched together to form the whole page.

• Apart from the development work each microservice creation included setting up an automated deployment pipeline that deployed the service in each environment using docker containers and performed regular health-checks before proceeding.

• Worked on a real-time data pipeline that streamed flight search pricing data into an easy to query ElasticSearch datastore.

• Developed a recommendation engine to get the cheapest air prices for historic searches for landing pages.

• Developed a micro-service to intelligently generate popular flight crosslinks based on the search data from the pipeline.

Site-Awareness Automation

• Led the overhaul and automation of our Site-awareness system. This system served as a store of all landing page urls and SEO meta-information for each url on Orbitz sites. It also handled the generation of xml sitemaps.

• I spearheaded the effort to re-architect the host to run continuously, with automated restful triggers to control the job flow. These triggers were also used to update the sitemaps and the landing page store as frequently as possible.

• Created a system to auto-deploy static SEO files like xml sitemaps and robots.txt to production with changes in our landing page configurations. As well as monitor SEO stats by plugging into Google Search Console api.

Software Engineer I	**Orbitz Worldwide**	**Jan 2014 – Feb 2015**

Brand Localization and Site availability

• Localization for various geographies for orbitz brands like hotelclub and ebookers.

• Enhancements to logging and features for the 'flex framework' to improve and track the availability of landing pages.

• Created map-reduce jobs to collect availability stats from a large volume of hadoop logs.

Software Engineer	**Nokia Corporation**	**June 2013 – Dec 2013**

Nokia Xpress browser

• Design and development of features that involve client-server communication, client-side analytics & UI enhancements.

• Automated tests, critical bug fixes and general maintenance as a part of regular release cycles.

Research Assistant	**University of Illinois at Chicago**	**May 2012 – May 2013**

Electronic Visualization Lab – RailSim Project

• The project involved using rail-track simulation data provided by the mechanical department (simulated) and visualize it using 'OmegaLib' a C++ visualization library for 'The CAVE 2' a 3d virtual reality environment.

• Used Open Scene graph, OpenGL and shader programming(GLSL) for the project.

LANGUAGES AND TECHNOLOGIES

Languages: C++, Java, JavaScript, Bash, Python, C, Smalltalk
Development tools: Git, Unity3d, Intellij IDE, Stash, Vagrant, Visual Studio,
Frameworks: *Spring, AngularJS, Express, Bootstrap, RabbitMq(messaging)*
Deployment and Continuous delivery: Jenkins, Docker, Opswise
Data Stores: *Solr, ElasticSearch, Couchbase, EhCache*

EDUCATION

M.S, Computer Science, GPA 3.62	University of Illinois at Chicago	**Fall 2011 – May 2013**
B.Tech, Telecommunications	NMIMS University, Mumbai	**Aug 2006 – May 2011**
MBA, Technology Management	NMIMS University, Mumbai	**Aug 2006 – May 2011**

Relevant Coursework: Computer Algorithms, Data Structures, Object Oriented Languages and Environments, Computer Graphics, Artificial Intelligence I & II, Advanced Algorithms, Video Game Design and Development

Portfolio link:
vaibhavgovilkar.weebly.com

PROJECTS

Wishboard: A full fledged 'wishlist sharing' single page webapp that uses Firebase as a backend. This app features real-time syncing between clients as elements are added and removed from shared lists. Currently working on authentication to identify specific users and creating 'wishboards' to be shared with others.
JavaScript, AngularJS, Bootstrap, Firebase, HTML, CSS
Work in progress at : https://dazzling-torch-2985.firebaseapp.com/

Critical Mass (academic game project): Led a cross-functional team of 5 to develop a stereoscopic 3d first person physics puzzle shooter. Apart from my role as the team leader responsible for the game design and concept, I also acted as the chief programmer for the physics and game-play. ***JavaScript, Unity3D***

Object Oriented Design and Data Structures (academic projects): Projects involving heap and tree data structures construction and operations. Projects involving advanced C++ concepts like polymorphism, abstract classes, dynamic binding of virtual functions, dynamic memory allocation and multiple inheritance to achieve a hierarchy of custom built data-structures that included Collections, Ordered Collections and Arrays.
C++, Smalltalk

Artificial Intelligence (academic projects): Developed several intelligent agents in java that included *1.* Simple reflex agent *2.* Model based reflex agent *3.* Utility based agent *4.* Goal based agent. Implemented breadth-first, depth-first, recursive best-first and A* search algorithms using multiple heuristics to solve various problems. Constructed a decision tree to make uninformed decisions using information gain, gain ratio and Naive bayes classifier for attribute selection. ***Java***

Mobile Apps: 1. Smiley Popper (android)- A simple whack-a-mole style app with randomly generating smileys that need to be popped. 2. Date difference calculator (iOS)- A simple app that calculates the number of days between two dates.

Gravity bomber: A game using 2D-physics and a unique mechanic that allows the manipulation of gravity to control bombs deployed by a player-controlled space ship. ***Flash, ActionScript***