Rupinder Dhillon

rupadhillon.com   github.com/helloRupa   linkedin.com/in/rupadhillon

SKILLS

React, Redux, Ruby, Rails, JavaScript, jQuery, HTML, CSS, SQL, Arduino, Max, Processing

PROFILE

Software engineer and educator with over 6 years of experience in teaching technical concepts, including programming, game design, and circuit design to students of all ages. Over 7 years of experience designing curriculum, including proposing and deploying new educational programs. Familiar with the entire product cycle, from ideation and prototyping, to user testing and release. Shipped code includes Rock Vibe, an accessible musical desktop game, and custom components created for the learning content management system at Autodesk.

PROJECTS

Bench BnB (React, Redux, Rails, AWS, Google Maps API)   Live   GitHub
Review and view benches in your local area. Log in to create a new bench and leave a review. Loosely based on AirBnB. Bench list updates when map is dragged or zoomed, or when filters are changed.

Pokedex (React, Redux, Rails)   Live   GitHub
View and create Pokemon and their items. Edit Pokemon details on its show page. Includes form validation on the front- and backend.

Breddit (Rails, JavaScript)   Live   GitHub
MVP clone of Reddit on Rails. Visitors can view subs and posts. Logged-in users have create, edit, and delete permissions. Uses onebox gem to generate site previews for link posts.

EXPERIENCE

Contractor (Education and Software Engineering), Self-Employed   NOV 2016 - PRESENT
Developed interactive audio software for a live art performance. Designed visual assets and launched Shopify website for Tula Bakeshoppe. Received excellent feedback for tutoring students in C++ and Python. Designed and deployed online training for clients, including Autodesk.

Instructional Designer, Autodesk   MAR 2015 – NOV 2016
Improved the student and designer experience by developing new interactive components for the learning content management system using JavaScript, CSS, and HTML. Designed highly-rated online learning experiences and was frequently requested for new projects.

Game Creator and Programmer, Rock Vibe   OCT 2011 – JUNE 2016
Prototyped, developed and released an accessible desktop game for blind and sighted users. Raised over $17,000 via Kickstarter. Designed and built hardware and software (Max, JavaScript, and Arduino) compatible with OS X and Windows. Co-authored a paper published by the Association for Computing Machinery.

Curriculum Manager and Developer, TechKnowHow   JAN 2012 – DEC 2014
Proposed, designed and launched the company's first-ever camp for older teens, featuring Unity game design and Arduino microcontrollers. Trained instructors to teach Unity, Arduino, GameMaker, and LEGO Robotics to kids and teens. Oversaw the development of curriculum across all subjects.

Contractor (Software and Hardware Developer), Self-Employed   JAN 2008 – JAN 2012
Developed interactive art exhibits, including a talking blanket and location-controlled multi-channel video experience using Max and Arduino. Designed prototype software for an audio-massage table.

Teaching Assistant and Instructor, UC Santa Cruz   SEPT 2007 – AUG 2009
Designed courses teaching Max programming for audio synthesis and video manipulation. Substituted for Electronics for Artmaking. Supported students via meetings, group tutoring, and by providing detailed feedback on assignments.

EDUCATION

UC Santa Cruz   2009
Master of Fine Arts: Digital Arts and New Media
Presented a paper on using tactile sound to create accessible musical experiences for the College Art Association. Co-authored a paper on an accessible computer game published by the Association for Computing Machinery.

London Metropolitan University   2006
Bachelor of Science: Music Technology (Audio Systems)
Received full marks on graduation project: an interactive MIDI-controllable granular synthesizer. Completed courses in C++, Visual Basic, Max Programming, and electrical engineering.