resume\_50@gmail.com  
837 184 7851  
Jake Kittell  
Principal - Happiness Tool Co. Inc  
Morrisville VT - Email me on Indeed: indeed.com/r/Jake-Kittell/2f01f0efe234bd2b  
Develop Great Engineered Products and Information Systems Willing to relocate: Anywhere  
Authorized to work in the US for any employer  
WORK EXPERIENCE  
Principal  
Happiness Tool Co. Inc - Morrisville VT - December 2010 to Present  
Principal Engineering Machine Design and Build and Software  
Happiness Tech LLC - Morrisville VT - June 2004 to Present  
solutions. Jake Kittell 802-888-1679 \*  
6/04 - Present Happiness Tech LLC Morrisville VT: Contract Machine Design and  
Custom Software. Principal.  
Happiness Tech LLC was founded to provide solutions for customers based on my principals of direct communication honesty and hard work. My experience at larger companies  
convinced me that I could best serve my customers from a small client oriented company.  
Over the first several years in business Happiness Tech LLC has produced several complete and functional machines a few complete software/database applications and a wide array of design and SolidWorks consulting and contract services for happy customers. Customers  
include Pratt & Whitney Suss Micro-Tec SB Electronics Northern Power Systems and iRobot  
Corp.  
Principal Engineer Contract  
Moscow Mills Manufacturing Service - Moscow VT - April 2003 to June 2004  
Design Engineering. President Anderson Leveille. 802-253-2036 x 108 \*  
4/03-6/04 Moscow Mills Manufacturing Service. Moscow VT: Contract Engineering and Machine Shop Services. Principal Engineer.  
While at this small company I was involved in several projects from concept through happy  
customers. These included a new enclosure design for a flat panel computer to be used as an operator interface. The new design reduced weight by a factor of three while also reducing  
manufacturing cost and addressing major cooling issues for the LCD and computer. As well I designed and built an X-Ray enclosure to house an in-process Electron Beam system. This enclosure was a complex labyrinth path for a printing web to pass through while keeping X- Rays in. Construction was formed and welded sheet metal to form a mold that then had lead cast in place.  
Lead R&D Staff  
iRobot Corp - Jaffrey NH - April 1997 to April 2003  
   
Member (E5) Design of mobile robots. Engineering oversight of manufacturing and quality. Operations Manager Jim Lenahan. (now at R&G Bank Note) 603-654-6185  
\*  
4/97-4/03 iRobot Corp. (formerly Real World Interface Inc). Milford NH: Manufacturer of intelligent mobile robots. Lead R&D Staff Member.  
Real World Interface was a young company of fifteen people hoping to move from a start up business to a profitable manufacturing company when I started. My first mission was to  
establish engineering controls on the manufacturing process.  
This included establishing a part numbering and naming system with revision control for everything from software to resistors and gears. Many assemblies were only sketched on scraps of paper without dates or titles. From this we grew to a state where it was clearly known what  
we were building and what we needed to do it. Lead time for robot orders went from 1 year to just a few weeks. Cost of Goods sold on these products went from 85% to less than 45%.  
Jake Kittell 722 Darling Rd.  
802-888-1679 Jake@HappinessTech.biz Morrisville VT 05661  
Having achieved this I moved on to design work for the next generation of robots. I had  
primary design responsibility for our line of three All Terrain Robotic Vehicles. These are  
rugged outdoor vehicles that can navigate serious terrain while carrying up to two powerful  
PCs. There are now several hundred of them serving the needs of robotic researchers from universities to national laboratories and US military defense programs.  
iRobot Corp - 1999 to 1999  
merged with I.S. Robotics to become iRobot Corp. The  
company is now 200 people strong. Work at iRobot included implementation of Oracle ERP system companywide importing half a million records from many assorted information systems. Mechanical leadership for iRobot's Packbot EOD robot. Design work included prototype design of iRobot's 7 Ft. long 6 axis robotic arm for the robot. EOD Robot This arm was designed to full military specifications able to resist all weather hi pressure wash down hi voltage electric shocks rigorous vibration and the sand of the Iraqi desert. It could lift 5 pounds at 7 feet horizontally yet weighed only 19 lbs.  
Design Engineer  
REHAU Inc - Springfield VT - October 1996 to April 1997  
Until recently REHAU designed and built all fabrication machinery and tooling for its North  
American operations in Germany. The fairly new group that I joined has the mission to take over this machinery production. I participated in the development of new gauging concepts to better measure what was produced. I gained hands on experience with machine wiring and  
pneumatics.  
Design Engineer  
REHAU Inc - Springfield NH - September 1996 to April 1997  
Design of fabrication machinery for PVC extrusions. Plant Manager: George Trombly 802-886-8595 \*  
Engineer  
Advanced Manufacturing & Development - Willits CA - April 1994 to August 1996  
Engineering responsibility for infrared paint dryer line. Engineering Manager: Ron Budish 707-459-9451.  
\*  
Engineer  
Bio-Plexus - Tolland CT - February 1993 to June 1993  
Designed and fabricated automatic test  
machine participated in product development. Director R&D: Rick Kearns. (Company is out of business now)  
\*  
Member Board of Directors  
University of CT Engineering Dept - Willimantic CT - June 1992 to May 1993  
Business  
supervision Manager: Alice Rubin 860-456-3611. \*  
Student Research Specialist  
University of CT Engineering Dept - Storrs CT - September 1990 to January 1993  
Prototype machining and shop maintenance. Manager: Tom Marcellino 860-486-2011. \*  
Proprietor Contractor Carpenter  
Yankee Roots Craftsmen - Mansfield CT - May 1988 to August 1990  
Home building additions remodeling. \*  
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Apprenticeship and Background  
Perkin Elmer - Stamford CT - 1970 to 1985  
CT.  
An apprentice in the most traditional sense of the word participating in engineering projects on a regular basis. My father a Principal Scientist (engineering) at Hughes/ Perkin Elmer  
Corporation worked mostly from our home. He is among the world's experts on micro  
positioning having done such things as achieve positional stability of good sized mirrors to the angstrom level for 12 hour periods. Together we made assemblies that traveled in the space  
shuttle and designed the machine that has polished many of the world's largest telescope  
mirrors (including the Hubble's). Facilities included a precision machine shop as well as thorough electronics and metrology capabilities. During this period I invented a machine to  
distribute mercury in arc lamps in a few seconds' time for Perkin-Elmer's lamp factory. This  
process was previously done by hand requiring skilled workers ten minutes per lamp.  
Opportunity was not spared to educate me in the ways of a craftsman. Craftsmanship is a  
never-ceasing desire to improve the product process and methods of what we do. I learned  
that attention to detail is the path to a quality finished product. Craftsmen look to the next  
level of performance even as the present one is being developed. I learned the skills to take a  
problem and develop solutions using sketches and analytical techniques to build precision parts and produce finished machinery and to make detailed drawings from the point of view of a  
shop person. This has been a great aid in winning the respect of shop personnel in my  
professional work.  
My Grandfather on my mother's side invented the first process to separate color images into dots for printing by Time magazine that is the foundation of modern color printing. He was an  
early pioneer in television and made the first non-military radar installation aboard a sea vessel while at GE. From him I gained the courage to invent whatever needs to be invented. This  
three generation long tradition of breaking new ground continues through my work.  
Related Skills  
People who work with me believe in my abilities to solve tough problems and to deal with them in a fair and honest way. Patience allows me to be methodical and thorough in my work and is the basis for a strong knack for having inventions work well on the first attempt. I enjoy  
working in group settings and utilize creative vision and listening skills to be a leader.  
Jake Kittell 722 Darling Rd.  
802-888-1679 Jake@HappinessTech.biz Morrisville VT 05661 Experience and Education  
EDUCATION  
BSME in design  
University of Connecticut - Morrisville VT  
ADDITIONAL INFORMATION  
DESIGN SKILLS GROUP & PERSONAL  
 Certified SolidWorks Professional 17years \* Flexible and cheerful!  
 FEA 10 Years \* Diplomatic  
 Photo Rendering 15 Years \* Maintain successful working relationships  
 Design for Manufacture / Assembly in OEM \* Able to inspire craftsmanship in teammates. capital equipment market for 16 years. \* High frustration threshold.  
 Design of 7 Ft. long 4 axis lightweight robotic \* Conflict resolution.  
arm for Explosive Ordinance Disposal.  
(iRobot PackBot EOD) MANUFACTURING  
 Expert precision sheet metal design.  
 Frame weldment Design. \* Designed engineering document control  
 Designed several production all terrain and new part numbering system radically  
mobile robots. improving product consistency and gross  
 Designed new generation industrial gas margin.  
Infrared oven developing technology that \* Technical lead and data conversion  
improved fuel efficiency 200%. programmer for companywide Oracle ERP  
implementation at iRobot Corp.  
COMPUTER SKILLS \* Mfg. Engineering responsibility for $2 million per year industrial gas dryer line.  
\* 35 years programming experience  
\* Reduced warrantee returns for gas burners  
\* Application Development using VB.NET by improving production methods saving  
Visual BASIC VBA and PLCs.  
$55k per year.  
\* Database Development on Oracle MySQL  
using SQL PL/SQL VB SHOP EXPERIENCE  
\* Company Infrastructure Development.  
Wrote user-friendly visual Inventory Bill of \* Lifelong machine shop experience enables Material MRP system that ran $2M/ year an intimate understanding of tolerancing configured robot manufacturing operation. and dimensioning.  
\* 19 years with SolidWorks \* Competent Machinist CNC and Manual.  
\* Expert Excel and Word application \* Experienced with all machine shop  
development skills. processes manual and CNC.  
\* High quality technical writing and  
documentation skills. PROJECT MANAGEMENT