### Richard K Baron

2581 California Park Drive Apt #165 Chico, Ca. 95928

Cell phone (530) 209-5425 Email: <u>gisandart@gmail.com</u> Website: <u>www.gisandart.com</u>

OBJECTIVE: Seeking OPPORTUNITIES to TEAM UP with other professionals AND/OR to

procure **FREE-LANCE**/Contract work in GIS, spatial analysis, cartography and/or landscape visualization. I am especially interested in 3-D visualization

and multimedia as applied to GIS applications, learning, etc.

**DESIRED WORK** Part-Time, Temporary, Contract, Part of a Team, preferably through

Telecommuting and Short Term Visits.

SITUATION:

EMPLOYMENT
HISTORY:
Employer: GISandART
Title: Sole Proprietor
Location: Redding, Ca

**Duration:** 6/1/2004 – Present

Job Duties:

My business (GISandART) is based around the use of GIS, 3D photorealistic landscape visualization, and multimedia/computer art. Most of my work recently has been cartographic such as wetland delineation mapping, vegetation mapping, terrain mapping and analysis, and maps for subdivision development. I have also had several GIS/ Landscape Visualization projects. I worked free-lance for several clients but also was a temporary (on-call) employee for *The Dangermond Group* in Sacramento, Ca.

### Projects:

- Worked as a member of the team for The Dangermond Group on the "California Delta project". Created several maps needed for the project.
- Ongoing project mapping "Arundo" occurrences in Shasta and Tehama County. Designed and developed a map showing and listing the occurrences of this weed for years 2005 – 2007.
- Completion of multimedia project for Ca Dept of Fish and Game Project involved creating an interactive multimedia tutorial that is readily downloadable from internet showing the use and step by step process of using CWR (California Wildlife Habitat) model and software.
- Created large scale slope map for Shasta County, showing various classes of percent slope so client could locate potential property.
- Created large map for Girls Scouts of America showing the boundaries of the Northern California Girl Scout Council. Map was detailed and feature intensive and used multiple symbologies and hillshades to distinguish the area inside and not inside the Council boundaries. I used up to 15 levels of annotation.
- GIS analysis and mapping for a land development project. Work used GIS
  to determine site locations based on multiple rules. There were many
  reiterations of work until a final map was completed for submission before
  county planning. Multiple slope analysis projects for building lots for local
  surveyor.
- Worked as an on-site GIS analyst for The Dangermond Group in Sacramento.
- Ongoing multiple GIS projects in wetland delineation, vegetation mapping watershed mapping and related for WRM (Wildland Resource Managers).
   Work includes GIS analysis, GPS retrieval and on-screen digitizing, creating finished maps for projects, and data conversion.
- Created and developed methodology for oak tree acreage assessment using remote sensing methods and GIS.
- GIS and 3D photorealistic visualization project for local mining project. Purpose of work was to show what the mine development over the next 30 years would look like, taken from multiple views. GIS work included importing and converting source data from CAD into GIS, adding new GIS

layers through digitizing, etc., creating a DEM from contour data, using Google Earth for buildings and other features and converting KMZ to State Plane Coordinate systems, and importing all the GIS layers as shapefiles or DEM data into the 3d Visualization project. Photos were taken in the field of trees and prepared for use in visualization software. Visualization included creating ground, camera viewpoints, sky, light, cloud models, terraffectors and area terraffectors for various features, creation and placement of multiple ecosystems, incorporation of trees and other images into ecosystems, etc. Many iterations of rendering were done.

- Ongoing GIS, 3D and photorealistic visualization project for land development project in Shasta Lake. Purpose is to get approval of development project before city council. GIS work included importing and converting source data from CAD into GIS, adding new GIS layers through digitizing, etc., integrating various contour sources together, creating a DEM from contour data, using Google Earth for pad sites and other features and converting KMZ to State Plane Coordinate systems, and importing all the GIS layers as shapefiles or DEM data into the 3d Visualization project. GIS terrain analysis included view shed analysis and line of sight analysis from different locations to see which pad sites could be seen. Visualization work included importing all data into visualization software, creating a basic ground, creating area and linear terraffectors, creating cloud models, sky, light, camera views, etc. PowerPoint presentation was developed to present in front of city council
- GIS and photorealistic visualization project for city of Temecula showing
  what a target hillside would look like if developed as planned from various
  viewpoints. GIS work included using shapefiles from the Dangermond
  Group, creating a DEM from an ESRI grid, creating several new layers, using
  Google Earth to digitize several hundred building footprints and convert to
  UTM coordinate system, and importing GIS work into landscape
  visualization software. Visualization included creating ground, camera
  viewpoints, sky, light, cloud models, terraffectors and area terraffectors for
  various features, creation and placement of multiple ecosystems,
  incorporation of trees and other images into ecosystems, etc. Many
  iterations of rendering were done.

**Employer: VESTRA Resources** 

Title: GIS Analyst and Visualization Creator

Location: Redding, CA
Duration: 10/2002 - 01/2004

Job Duties:

- Created 3-D Visualization of a proposed subdivision in Redding, California, using landscape visualization software (World Construction Set) and GIS software, Arc Map, 3D Analyst and Arc View.
- Created a 3D model of a proposed reservoir and did an initial view shed analysis for a SMUD (Sacramento Municipal Utilities District) project using 3D Analyst and Spatial Analyst.
- Integrated into existing digital photography proposed buildings for a court hearing for a realtor using a 3D animation package (Maya) and Photoshop.
- Created a set of map overlays depicting "Multiple Use of Forest Lands and Resources in Shasta County" for a local museum (Turtle Bay) using many different types of data from various sources using Arc 8.3.
- Built a 3D model of a series of underground mine shafts for a historic mine north of Redding, Ca. in Arc Map 8.3 using 3D Analyst and Spatial Analyst.
- Worked on various projects interpreting, rectifying, adding, and editing county and/or city parcel data with orthophotographs and AutoCAD DWG files using Arc Map and Parcel Editor (Novalis) and COGO.
- Built a geometric network for a stream project using Arc Hydro tools.
- Created various maps and other graphics (charts, etc) on demand for Mendocino County.
- Continued working on the CWHR 8.0 multimedia tutorial development using Macromedia Authorware.

Employer: CA Fish and Game Title: GIS Analyst ON SITE Location: Sacramento, CA Duration: 02/2000. -.10/2002

Job Duties: On Site Consultant from VESTRA RESOURCES.

- Developed Map Series for DFG pertaining to Suction Dredging Regulations. (Arc Map, Arc Catalog) by county
- Developed a series of B&W maps for Coho Salmon Project and accompanying public documents.
- Developed methods and prototype maps for showing stream gradients as a way to locate frog populations and other species distributions (Used Arc Map, Network, TIN, GRID).
- Frequently used the Internet for finding spatial data (DLG's, DRG's, etc). Wrote aml's to automate the conversion of SDTS data to Arc/Info overages.
- Developing a multimedia-based tutorial for using CWHR (California Wildlife Habitat Systems) software using Macromedia Authorware.
- Created the cover graphics using landscape visualization software, WCS (World Construction Set) and Macromedia Authorware).

**Employer:** VESTRA Resources

Title: GIS Analyst and Visualization Creator

Location: Redding, CA

Duration: 10/1998 - 02/2000

Job Duties:

- Created a landscape visualization of a major watershed.
- Created a 3D visualization for licensing for a proposed mining site project in Modoc Co. using WCS, Arc/Info and Arcview.
- Edited county parcels based on orthophotographs, using Arc Map and Parcel Editor, (Novalis), COGO as well as, Arc Edit.
- Developed a series of stream profiles using Arcview and 3D extensions.
- Worked on several different projects creating maps for environmental /legal issues in southern California using Arc Map.
- Helped put together a county-wide (Siskiyou Co) soils coverage using county, USFS, and other data sources. Dealt with issues of coincident lines, crosswalks, and mosaicing of different sources into one coverage.
- Developed and used GIS techniques such as IDW, kriging for spatial interpolation and classification of points for depicting surface/surface soil properties. I also developed layers depicting slope, aspect, and contours from DLG SDTS data.
- Developed a technique using GRID and a modified NDVI for calculation of crown density from photographs of trees. Used AML in Arc and Debabelizer software.
- Developed AML's for various data conversions, projection, regions, etc.
- Worked with Shasta-Trinity National Forest to create vegetation maps and tables comparing 1926 historic maps to present-day vegetation maps. Preparation of maps, tables, acreage calculations, etc. Work included scanning, layer registration, vectorization using ArcScan, Attributing of polygons. Also use of crosswalks, spatial analysis, etc.
- Created a methodology using AML and GRID to determine percent of crown vs. ground in orange groves.
- Taught WCS for a week at Fort APHILL, Virginia to Army foresters' in the use of landscape visualization for Army forests on that base.
- Used GIS and RS to create NDVI maps showing crop vigor.
- Was a project manager on some of the small vineyard projects. Duties included client contact, assessment of appropriate GIS and GPS methods, and development of custom orthos, arranging multispectral aerial photography and coordinating GPS. Work included proposing and maintaining a budget, scheduling work for techs, etc.

Employer: VESTRA Resources and Lassen National Forest

Title: GIS Analyst and Trainer

Location: Redding, CA

Duration: 12/1995 - 10/1998

Job Duties:

### At Lassen National Forest between 4/1997 and 10/1998

- Worked as a consultant (15 to 30 hrs / week) for Lassen National Forest between April 1997 and October 1998.
- Helped set-up and teach to Supervisor's Office and District staff Arc/Info and GIS. About 70% of time was used in training basic Arc/Info through more advanced spatial analysis (GRID, Regions, Dynamic Segmentation, TIN, Arced it, Arcplot, etc). 30% of time spent working on specific projects. Noteworthy projects included converting CFF to Arc/Info overages, linking Arc/Info and Oracle for soil layers, creation of fire prevention maps, and creation of a prototype multimedia Lassen Digital Library for fire information.

## At VESTRA Resources between 11/95 and 10/1998

- Organized, developed a working methodology and managed a project creating a series of geology/geomorphic maps for Pacific Lumber. Worked with one of the State Geologists. Supervised several technicians, in scanning, registering, vectorizing and editing layers.
- Organized, and developed a soils' mapping project for Shasta-Trinity National Forest. Supervised several technicians, managed project.
- Set-up, developed, and managed a series of mapping projects for various USFS from soils to hazards.
- Developed landscape visualization techniques using GIS, World Construction Set software for state-mandated timber harvest plans. Created visualizations, animations for several large timber companies. Also created several small multimedia productions on CD using sound, GIS, imagery, moving graphs, etc. Source data derived from management plans.

Employer: Shasta-Trinity Forest and VESTRA Resources

Title: GIS Analyst and

Trainer

Location: Redding, CA
Duration: 09/1994 - 12/1995
Job Duties: Fulltime Onsite Trainer

- Full-time 40 hour on site position.
- Primary goal was to help forest staff learn GIS (ARC/Info) (SO GIS dept).
   Second goal was to provide total GIS support for detailed watershed analysis project.
- Trained and supervised 3 GIS staff in SO and several others in Districts. Training advanced from basic Arc/Info, Arcview to more advanced GIS analysis (GRID, regions, etc). About 70% of work was in training. 30% of time spent on providing GIS support for biologists, geologists, and other resource people in undertaking a detailed watershed analysis.

Employer: VESTRA Resources Title: GIS Analyst Location: Redding, CA Duration: 08/1993

- 09/1994 **Job Duties**:

- Worked on hydroelectric relicensing project. Used Arced it, Dynamic
   Segmentation, Network, Tin to create maps from data supplied by various vendors.
- Worked on various small projects working with symbol sets, stipples, graphics, etc., especially for vegetation representation.

Employer: San Diego State University, Graduate Department of Geography

Title: Research Assistant/ Grad Student.

Location: San Diego, CA Duration: 02/1991 - 08/1993

**Job Duties:** 

 Worked on various GIS projects in Geography Department in GIS lab Center for Earth Science and Research (CESAR)>. Helped to teach GIS to various groups of people, create graphics, Gave demos of GIS capabilities.

# OTHER EMPLOYMENT HISTORY:

 Worked in various different types of jobs from 1970 to 1990 including: Geologist, business type jobs such as material control manager, restaurant manager, waiter, shipping clerk, taxicab driver, draftsman, and other types of jobs. Likewise, have worked as a fine artist 1977.

**EDUCATION:** Major: Geography, GIS

School: San Diego State University

Location: CA Degree: MA Program Completion Date:

06/1993

Major: Art, Drawing, Painting School: U of Colorado, Denver

Location: CO
Degree: BA Program
Completion Date: 06/1978
Major: Geology, History
School: St. Louis University

Location: MO Degree: BS

Completion Date: 06/1970

# SKILLS AND ABILITIES:

- 20 Yrs experience in GIS, Cartography, and Spatial Analysis using ESRI software (Up to ArcGIS 10). Proficient in ESRI products: Workstation Arc/Info (all modules including GRID, TIN, 3D, etc. Arc Desktop including Arc Map, Arc Catalog (Version 9.x). And Arcview 3.x. Have taken the ESRI course in ARC IMS. Proficient in AML programming. Familiar with Oracle, Microsoft Access, Excel, etc.
- Certified Trainer and experience in photorealistic landscape visualization using WCS and VNS.
- Strong background in graphics, some multimedia and web design
- Experience in training others in GIS.
- Some experience in project management.
- I work well with people; have a genuine interest in the client relationship and client satisfaction. Adapt well to new situations. Like to problem solve. Like to work independently and am self-motivated. Am creative, curious, and personable.

# SOFTWARE: Familiarity to Competent using various software such as:

 ESRI ARC GIS DESKTOP and ArcView, Community VIZ, 3D Nature's Visual Nature Studio, Adobe Products including, Illustrator, Photoshop, Acrobat, In-Design, Dreamweaver, Flash, and various plug-ins, 3D software including Maya and XSI and 3D Studio Max, Microsoft Office Suite, including, Excel, Access and PowerPoint. HARDWARE: PC workstation and Laptop, Scanner, Epson 2400 printer and access to large

format printers and scanners.

NOTES AND ESRI Certified Course in Arc IMS

OTHER Graduate of 3D Nature's 3D Nature Academy (VNS 2)

**INFORMATION:** Certified Trainer of WCS and VNS 2.

**ART WORK:** I worked as an artist from 1977 through 1992, primarily, a painter.

I had some success, being represented by various galleries in Maine and in San Diego, California. I entered several competitions. The mediums I worked in

were Oil, Acrylic, Gouache, Encaustics and mixed media.

From 1992 through 2007 I concentrated on my GIS career but worked a lot using various computer graphic software programs such as Photoshop, Painter, Illustrator as well as dabbling with 3d programs such as Maya, ZBrush and other 3d type programs. I used World Construction Set and VNS primarily in my 3D visualization work I also created Power Point Presentations and used

Macromedia Authorware for my multimedia presentations.

I am beginning to return to art making with strong interests in using digital and

traditional printmaking methods as well as collage in my art.