

# Application Form

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## Profile

SOHEILA

First Name

V

Middle Initial

BANA

Last Name

Home Address

Suite or Apt

Richmond

City

CA

State

94803

Postal Code

Primary Phone

Email Address

Which supervisorial district do you live in?

District 1

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## Education

Select the option that applies to your high school education \*

High School Diploma

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### College/ University A

Name of College Attended

University of California at Berkeley

Degree Type / Course of Study / Major

BS / Electrical Engineering and Computer Sciences

Degree Awarded?

Yes  No

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### College/ University B

Name of College Attended

University of California at Berkeley

**Degree Type / Course of Study / Major**

MS / Electrical Engineering and Computer Sciences

**Degree Awarded?**

Yes  No

**College/ University C**

**Name of College Attended**

University of California at Berekley

**Degree Type / Course of Study / Major**

PhD / Electrical Engineering and Computer Sciences

**Degree Awarded?**

Yes  No

**Other schools / training completed:**

**Course Studied**

Real Estate Salesperson

**Hours Completed**

90

**Certificate Awarded?**

Yes  No

**Board and Interest**

**Which Boards would you like to apply for?**

Contra Costa County Fire Protection District - Advisory Fire Commission: Submitted

**Seat Name**

**Have you ever attended a meeting of the advisory board for which you are applying?**

Yes  No

**If you have attended, how many meetings have you attended?**

**Please explain why you would like to serve on this particular board, committee, or commission.**

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My interest in joining Measure X Community Advisory Board stems from my passion to serve my community and a clear and realistic understanding of different needs for community empowerment, improvement and preparedness for disasters. I have lived in Contra Costa County for decades and as both an engineer working for Caltrans and a real estate agent I have had the opportunity to work all over the county and learn of its issues as well as local advantages and disadvantages.

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### **Qualifications and Volunteer Experience**

**I would like to be considered for appointment to other advisory boards for which I may be qualified.**

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Yes  No

**Are you currently or have you ever been appointed to a Contra Costa County advisory board, commission, or committee?**

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Yes  No

**List any volunteer or community experience, including any advisory boards on which you have served.**

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I have organized a community grassroots, 94803 Emergency Preparedness Alliance, for the residents of unincorporated El Sobrante and city of Richmond in the zip code 94803. I have been successful in making connections with the offices of emergency services in both CC County and City of Richmond to empower the residents and relay their needs to the officials. In addition, I have been: \* Director of Professional Engineers in California Government (PECG), the Bay Area Section with over 10,000 members \* Member of Board of Director of Citizens for Greener Communities \* Member of Steering Committee of Grassroots for East Bay Joint Power Agency for Wildfire Protection and Vegetation Management which is organized to create support of local officials for a Joint Power Agency. \* Commissioner at the City of Richmond Recreation and Parks Commission, I have been working to improve the condition and safety of our parks. \* Trustee at the Contra Costa County Mosquito and Vector Control District, representing the city of Richmond \* Mentoring minority college students at Richmond Promise \* Co-founder and Co-President of STAR for Breast Cancer, I have organized fundraising for cancer patients

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**Describe your qualifications for this appointment. (NOTE: you may also include a copy of your resume with this application)**

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I have worked with people of different backgrounds, ethnicities, levels of education and needs both as a volunteer and as a professional. I have extensive work experience with planning, project evaluation and budgeting both as an engineer with millions of dollars and as a volunteer with more limited budgets. As a real estate professional, I have different socioeconomic pockets of Contra Costa County and am familiar with the needs of different communities. I strongly believe in partnership of community and local government as well as residents' empowerment through raising awareness and providing them with simple tools to build community teams. This is especially true when it comes to wildfire prevention, emergency preparedness and disaster recovery.

[Soheila Bana Resume 4 CCC.pdf](#)

Upload a Resume

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**Conflict of Interest and Certification**

Do you have a Familial or Financial Relationship with a member of the Board of Supervisors?

Yes  No

If Yes, please identify the nature of the relationship:

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Do you have any financial relationships with the County such as grants, contracts, or other economic relations?

Yes  No

If Yes, please identify the nature of the relationship:

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**Please Agree with the Following Statement**

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I certify that the statements made by me in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge and undersand that all information in this application is publicly accessible. I understand that misstatements and/or omissions of material fact may cause forfeiture of my rights to serve on a board, committee, or commission in Contra Costa County.

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I Agree

# Soheila Bana

SoheilaBana@gmail.com

(U.S. Citizen)

El Sobrante, CA 94803

## EDUCATION

### *UNIVERSITY OF CALIFORNIA AT BERKELEY*

**Electrical Engineering and Computer Sciences** (Minor in Mathematics)

**Ph.D.** Dec 2000

**M.S.** May 1994

**B.S.** May 1990

## EXPERIENCE: INDUSTRY

### **TRANSPORTATION ENGINEER**, California Dept. of Transportation, Oakland: 02-21

Designing electrical systems for highway lighting, signals and TMS. Preparing plans, specifications and estimates (PS&E) for highway systems with regards to the approved standards and regulations. Reviewing PS&E compatibility with existing and upcoming telecommunication technologies. Previously maintained TMS elements in the field, configuring and implementing a variety of communication networking equipment and traffic operation system (TOS) elements in freeways, including closed circuit TV cameras, changeable message signs and highway advisory radios, in order to provide real-time traffic images and information to the public and private agencies and research centers in conjunction with the Traffic Management Center (TMC). Additionally, worked in TMC, monitoring the accuracy, continuity and back-up of the data received from the field in different formats and ensuring its real-time accessibility to the dispatchers and CHP through large monitors as well as real-time management of traffic control tools such as CMS and HAR.

### **SENIOR TECHNOLOGY ARCHITECT**, 3Com Inc., Santa Clara: 00- 01

Managed a team of R&D engineers in the wireless communication department. Designed new techniques for wireless communication, including a method for collaborative coexistence of wireless LAN, i.e., 802.11b and wireless PAN, i.e, Bluetooth, in 2.4GHz. Worked closely with product quality and manufacturing engineers to achieve flexibility in design while following the industry standards and meeting the market deadlines. Actively participated in drafting the wireless industry standards by participating at the national meetings of the IEEE.

### **RESEARCH ASSISTANT**, University of California at Berkeley: 89-91 & 94-00

Invented a Space/Time Division Multiple Access scheme for ad-hoc mobile wireless network of automated vehicles. Proposed a safety formalism and a distributed control algorithm for interacting automated vehicles and designed communication protocols for the distributed algorithmic implementation. Designed innovative address resolution protocols for automated vehicles in one-lane automated highway as a flat ad-hoc network and verified the protocols using SPIN verification tool.

Invented a local positioning scheme for automated vehicles to be used in communication address resolution. Developed an efficient method for measuring the Gate-to-Source/Drain capacitance via I-V measurements during IC production. This method eliminates the need for direct capacitance measurements during production and improves the process and allows a better device modeling and chip pricing based upon speed and performance. Designed an Automatic Gain Controlled amplifier to be used with micro-sensors.

### **DESIGN ENGINEER**, Chrontel, Inc., Milpitas: 92-94

Designed transistor-level CMOS analog/digital circuitry including ring oscillators, voltage references, current sources, amplifiers, buffers, Schmidt triggers, I/O circuits and test modes. Responsibilities included spec review, scheduling, design verification, chip floor planning and chip layout along with other related duties such as SPICE-fitting the fabrication models, testing parts for binning specifications, etc. Designed and characterized a standard cell library.

### **R&D ENGINEER**, Hewlett-Packard, Stanford Park Division: 1989

Designed and developed a quadrature demodulator which would be a part of a Modular Measurement System to improve HP-8981 to operate at a specific desired frequency with a high degree of accuracy, without using software calibration.

## **EXPERIENCE: ACADEMIA**

***ASSOCIATE DEAN, DeVry University, Fremont: 01- 02***

Managed the faculty and staff at the Department of Electronics Technology and supervised the day-to-day operations of the program. Actively participated in the successful accreditation process of the program. Interviewed and hired new faculty. Provided mentorship to all faculty on an ongoing basis. Performed annual faculty evaluation and proposed improvement plans when needed. Approved the class schedule for the department. Built and maintained partnerships and liaisons with the industry to coordinate the curriculum according to the needs of the local industry. Managed student academic affairs on a daily basis through face to face meetings in order to resolve their issues.

***TEACHING ASSISTANT, University of California at Berkeley: 90-91 & 94-00***

Assisted professors in teaching classes by conducting discussion sessions for classes of 40 to 200 students for a variety of courses in Microelectronic Circuits, Electronics Laboratory, Microelectronic Devices and Circuits, Communication Networks, Analog and Digital Integrated Circuits.

Conducted similar discussion sessions for industry professionals taking online courses at UC Berkeley.

## **EXPERIENCE: VOLUNTEER**

***HUMAN RIGHTS DEFENDER, 97 –present***

Defending the human rights of women, children and ethnic and religious minorities through writing numerous scholarly articles, giving talks at local and international gatherings and conferences, and giving interviews on various radio and TV channels. Initiating international campaigns against death penalty in Iran. Organizing campaigns to save lives of specific juvenile offenders. Supporting, advising and guiding local women human rights defender lawyers and activists in Iran to organize gender education workshops and establish NGOs for women's rights advocacy.

***COMMISSIONER, Richmond Parks and Recreation Commission. 17 -present***

Working as a liaison between the City Council and residents of El Sobrante and Marina Bay neighborhoods to improve the quality of living and enhance enjoyment of recreational opportunities for all those residents. Working along with other Commissioners in advisory capacity to the City Council on all matters pertaining to public recreation, preserving the parks' biological diversity and protecting natural and cultural resources of Richmond while providing opportunities for high quality outdoor recreation and promoting recreational programs for the youth. Working with other entities such as Citizens for East Shore Parks and Richmond Bicycle/Pedestrian Advisory group to make streets of Richmond biker friendly.

***CO-FOUNDER & CO-PRESIDENT, Support, Treatment, Awareness and Research (STAR) for Breast Cancer. 09 -present***

Directing organization's overall activities including setting up and overseeing various planning committees' work. Leading the development committee which activities include generating fundraising ideas.

Organizing online campaigns. Designing educational and promotional materials. Recruiting volunteers for fundraising events, supervising and coordinating their work. Making presentations to potential partners or corporate donors. Building relationship with sister organizations at local and international level as well as community organizers to create effective campaigns. Devising strategies for reaching out to women of Middle Eastern origin and raising awareness in different communities while considering cultural sensitivities.

***PRESIDENT & TRUSTEE, Contra Costa Mosquito and Vector Control District Board: 09-present***

Sharing the responsibility of overseeing the operation of the District with regards to effective prevention of mosquito and vector diseases, financial management, environmental pollution, public relation, and employee management without interfering with the day to day business of the District. Participating in

national conferences about the management and environmental impact of vector control. For one year, presided over the regular meetings of the Board of Trustees. Set the meetings' agenda. Advised the board on making decisions. Evaluated the annual performance of the CEO.

***HONORARY PARTNER, Equality Now: 07-present***

Acting as a liaison between the local activists and grassroots campaign organizers to defend women's rights in Iran and the international organization of Equality Now that raises global awareness and builds support among citizens as well as policy makers and politicians in different countries for the causes.

***LOCAL ADVISOR, Mama Cash: 07-present***

Providing advice to the organization with regards to the local women's organization in Pakistan, Iran and Afghanistan that need financial support and provide feedback about the impact of the supported projects on women's movement and rights. Guiding local women in those countries towards capacity building, empowerment, organizing and articulating their needs and writing proposals for grants to Mama Cash.

***INTERNATIONAL CAMPAIGN COORDINATOR, Stop Stoning Forever: 06- 09***

Coordinated the strategy as well as the step by step tactics of international advocacy by human rights organizations such as Amnesty International and Equality Now with the local campaign activists in Iran, including lawyers and journalists, to raise worldwide awareness about the legal practice of stoning in Iran for the so called sexual crimes and build a strong and active global opposition to it. Recruited and managed an international group of volunteer translators to expedite the transmission of reliable detailed and up to date news about the campaign and the Iranian government's reaction to it. The campaign saved more than ten lives from stoning and led to the removal of the text regarding stoning as a punishment in the Islamic Penal Code by the Iranian government.

***FOUNDER & PRESIDENT, Daayeh International Alliance to Nurture Children. 97 -01***

Directed the organization's activities to find educational sponsors for needy children in Iran. Recruited and supervised a group of local volunteers in Iran to identify the needy children and watch their progress. Initiated and managed online campaigns. Organized fundraising events. Recruited and supervised volunteers for the fundraising events.

***FOUNDER & MODERATOR, Madar-Pedar: 97-07***

Founded the first online discussion group of parents in California to address and discuss parenting concerns as well as cultural issues of raising bi-cultural children. Moderated daily discussions among 200+ members on a wide range of issues from celebrating cultural festivities at children's schools to whether to allow children to sleep over at their friends'.

***CO-PRESIDENT & MEMBER, Women in Computer Science & Electrical Engineering (WICSE): 93-99***

Actively participated in initiating, proposing and getting approved by the UC Berkeley faculty the first parent policy for college students in the nation that would allow maternity/paternity leave to student parents with health insurance and extended time for academic milestones. This policy later on was extended to all the University of California campuses. Spearheaded submitting women engineers' proposals to the industry decision makers for improving gender parity in engineering.

**TECHNICAL PUBLICATIONS & PRESENTATIONS**

- S. Bana and P. Varaiya, "Space Division Multiple Access (SDMA):A Robust Self-organizing Ad-hoc Network Architecture and MAC Protocol", Submitted to the IEEE Fourth International Conference on Intelligent Transportation Systems, Oakland, August 25-29, 2001
- S. Bana and P. Varaiya, "Automated Vehicle Navigation via Magnetic Signals", Presented at the International Association of Institutes of Navigation Congress/Institute of Navigation Annual Meeting, San Diego, June 26-28, 2000.
- S. Bana and P. Varaiya, "Address Resolution in One Lane Automated Highway Systems", PATH Research Report, UCB-ITS-PRR-99-22, 1999.

- S. Bana and P. Varaiya, “Position Location in AHS by Magnetic Pseudo-Noise Signals”, PATH Research Report UCB-ITS-PRR-99-21, 1999.
- S. Bana and S. Hassoun, “Practices for Recruiting and Retaining Graduate Women Students in Computer Science and Engineering’, Presented at the Computing Research Association Conference at Snowbird, Utah, July 26-28, 1998.

## **PATENTS**

- A Method of Collaborative Coexistence for 802.11b and Bluetooth, 3Com (No. 3672.TDC)
- Variable Key Encryption for Wireless Communication, 3Com (No. 3612.TDC)
- Space Division Multiple Access (SDMA), UC Berkeley ( No. B00-092)
- Magnetic Positioning System (MPS),UC Berkeley (No. B01-002)