



CLERK OF THE BOARD DIVISION  
OF THE BOARD OF SUPERVISORS' OFFICE

# COUNTY OF HUMBOLDT

825 FIFTH STREET  
EUREKA, CALIF. 95501-1153

PHONE (707) 476-2384; 445-7299 (FAX)

**RECEIVED**  
FEB 16 2023  
Clerk  
Board of Supervisors

## APPLICATION TO SERVE ON THE HUMBOLDT COUNTY PLANNING COMMISSION

APPLICANT NAME: Jerome Carman Qiriazhi

MAILING ADDRESS: [REDACTED], Eureka CA 95501

TELEPHONE: [REDACTED] Work: [REDACTED] Fax: \_\_\_\_\_

E-MAIL ADDRESS: hcpc.qiriazhi@eiaservices.net

OCCUPATION: Transit Planner, Humboldt Transit Authority

PERSONAL REFERENCES:

(1) Aisha Cissna PHONE: [REDACTED]

(2) Matthew Marshall PHONE: [REDACTED]

PRIOR ADVISORY BOARD OR BOARD OF DIRECTORS EXPERIENCE?  NO  YES

PLEASE WRITE A BRIEF STATEMENT DESCRIBING WHY YOU'RE INTERESTED IN SERVING ON THE **PLANNING COMMISSION**.

My primary motivation is to serve my community. I see the role of the Planning Commission as helping a diverse community implement a collective vision one project at a time. I believe to do this effectively requires Commissioners to listen first, be fair and open-minded, and maintain an ethical and objective stance. To be effective also requires respect of the long-term impact that planning decisions have on the health and well being of our community, our neighbors, and the land on which we rest. I bring a decade of experience serving local and regional planning efforts as a technical consultant, academic researcher, and public transit planner. As a Commissioner, I would continue the same commitment to sustainable and equitable growth that I have held through my career.

PLEASE ATTACH A CURRENT RESUME.

DATE: February 15th, 2023 SIGNATURE: [Signature]

I declare under penalty of perjury under the laws of the State of California that the above is true and correct

**SUBMIT THIS APPLICATION TO:**  
HUMBOLDT COUNTY PLANNING COMMISSION, Clerk of the Board, 825 Fifth Street, Suite 111,  
Eureka, CA 95501-1153.

DATE TO SUPERVISOR \_\_\_\_\_ DATE APPROVED \_\_\_\_\_ NOT APPROVED \_\_\_\_\_

# Jerome Carman Qiriazhi

## Contact Information

Phone: [REDACTED]  
E-mail: hcpc.qiriazhi@eiaservices.net

## Address

[REDACTED]  
Eureka, CA 95501

## EDUCATION

**Humboldt State University** 2015

Major: M.S. in Environmental Systems: Environmental Resources Engineering, Renewable Energy Focus  
Thesis Topic: Viability of hydrogen production from biomass sugars using autothermal reformation and waste exhaust heat from internal combustion engines.

**University Of California, Santa Cruz** 2010

Major: B.S. in Physics  
Thesis Topic: Viability of a signal acquisition design concept using silicon strip particle detectors. Motivated and funded by the International Linear Collider project and the Department Of Energy.

## CERTIFICATIONS

- *Engineer-In-Training*, State of California, 2012, #145943

## EXPERIENCE

**Transit Planner** **Humboldt Transit Authority** 2022 - present  
Lead on Innovative Clean Transit compliance, reporting on key performance indicators, support planning and deployment of new projects, grant writing, coordination with County and City planning and engineering departments, support policy advocacy, project management.

**Senior Research Engineer** **Schatz Energy Research Center** 2018 - 2022  
Responsibilities of Research Engineer position with increased management and grant funding responsibility, and strategy development of the Center's transportation research tract.

**Owner, Principle Analyst** **Environmental Indicator Accounting Services** 2016 - present  
Own and operate a sole proprietorship consulting business focused on accounting of environmental indicators for the development of environmental statistics that assess the status of and trends in an environmental system's ability to support a healthy ecosystem. Applications include community planning, project impact assessments, compliance with environmental regulations, and environmental justice. Specialize in greenhouse gas emissions inventory development at the local government level.

**Research Engineer** **Schatz Energy Research Center** 2015 - 2018  
Manage and assist with a variety of clean energy planning and early market deployment projects in the areas of low carbon transportation, carbon life cycle assessment, and distributed energy resources. Also lead and assist in the development of grant proposals in areas related to clean and renewable energy.

**Energy Specialist** **Redwood Coast Energy Authority** 2014 - 2015  
In addition to Program Assistant responsibilities, implemented a diverse set of energy programs, managed sustainable transportation planning projects, delegated tasks to and managed workload of staff members, provided supervisory support.

**Program Assistant** **Redwood Coast Energy Authority** 2013 - 2014  
Provided technical analysis services for a diverse set of energy programs including sustainable transportation planning projects, conducted greenhouse gas emissions analysis for municipal and community inventories and special projects, developed climate action plans for local government and tribal agencies.

**Volunteer Researcher** **Schatz Energy Research Center** 2010 - 2012  
Analysis of biomass torrefaction, and the viability of heat extraction from the thermal oxidation of volatile organic compounds emitted during the torrefaction process. Assessment of hydrogen production from biomass sugars using autothermal reformation.

**Junior Specialist UCSC Earth And Planetary Sciences Dept. 2009 - 2011**  
Performed data analysis on thermodynamic and micro-physical data associated with stratocumulus clouds for the Physics Of Stratocumulus Top project. Goal was to gain an understanding of the life cycle, precipitation processes, and energy budget of the large stratocumulus decks found off the Pacific coast of North and South America.

**Undergraduate Researcher Santa Cruz Institute Of Particle Physics 2008 - 2010**  
Designed and tested a printed circuit board model of a high energy particle detector to explore the viability of a spatial position measurement technique called charge division.

#### **PEER REVIEWED PAPERS**

- *How the U.S. Renewable Fuel Standard could use garbage to pay for electric vehicles.* Amin Younes, Kevin R. Fingerman, Cassidy Barrientos, Jerome Carman, Karly Johnson, Eli S. Wallach. Energy Policy 2022, 166, 112916.
- *Observational Constraints On Entrainment And The Entrainment Interface Layer In Stratocumulus,* J. K. Carman, D. L. Rossiter, D. Khelif, H. H. Jonsson, I. C. Faloon, P. Y. Chuang, Atmospheric Chemistry and Physics, 12, 22 (2012) 11135 - 11152
- *Longitudinal Resistive Charge Division In Multi-channel Silicon Strip Sensors,* J. K. Carman, V. Fadeyev, K. Mistry, R. Partridge, B. A. Schumm, E. Spencer, M. Wilder, Nuclear Instruments and Methods in Physics Research Section A, 646 (2011) 118-125
- *ILC Instrumentation R&D At SCIPP,* J. Carman, S. Crosby, V. Fadeyev, R. Partridge, B. A. Schumm, N. Spencer, and M. Wilder, arXiv:0901.2397v1
- *Characterizing The Noise Performance of the KPiX ASIC Readout Chip,* J. Carman, T. K. Nelson, SLAC-TN-07-022 (2007)

#### **NON-PEER REVIEWED REPORTS AND TOOLS**

- *Humboldt Regional Climate Action Plan: Public Review Draft.* 2022. Jerome Carman, Aisha Cissna, Michael Furniss, Katy Gurin, Connor McGuigan, Michael Richardson, Sam Smith. [humboldt.gov/2464/Climate-Action-Plan](https://humboldt.gov/2464/Climate-Action-Plan).
- *Task 4.1: Offshore Wind Power Generation Scenarios Report.* 2022. Wallach, E., Carman, J., Alva, Z., Chamberlin, C., and Jacobson, A. EPC-19-011. Humboldt, CA: Schatz Energy Research Center.
- *Microgrid Electric Vehicle Charging Control System User Manual: Version 1.* 2021. Machen, Scott, Andrew Harris, Jerome Carman. California Energy Commission.
- *California Biopower Impacts Project: Climate and Air Pollution Impacts of Generating Biopower from Forest Residues in California.* 2021. Fingerman, Kevin and Jerome Carman. CEC-500-2021-053.
- *Toward Carbon-Free Hot Water and Industrial Heat with Efficient and Flexible Heat Pumps.* 2021. Alstone, P., Mills, E., Carman, J., and Cervantes, A. Arcata, CA: Schatz Energy Research Center. [schatzcenter.org/pubs/2021-heatpumps-R1.pdf](https://schatzcenter.org/pubs/2021-heatpumps-R1.pdf)
- *Task 2: Offshore Wind Speed Report.* 2021. Wallach, E.; Carman, J., Chamberlin, C., and Jacobson, A. EPC-19-011. Humboldt, CA: Schatz Energy Research Center.
- *Climate Impacts of Biopower Generation from Forest Residues in California.* 2021. Fingerman, Kevin and Jerome Carman. EPC-16-047. Humboldt, CA: Schatz Energy Research Center. [schatzcenter.org/pubs/2021-biomass-R1.pdf](https://schatzcenter.org/pubs/2021-biomass-R1.pdf).
- *California Biomass Residue Emissions Characterization (C-BREC) Model Framework: Version 1.2.* 2021. Carman, J., Severy, M., Barrientos, C., Blasdel, M., Geronimo, C., Harris, A., Hsu, C., Kane, J., Rios-Romero, S., Wright, M., and Fingerman, K. EPC-16-047. Humboldt, CA: Schatz Energy Research Center. [schatzcenter.org/pubs/2021-biomass-R2.pdf](https://schatzcenter.org/pubs/2021-biomass-R2.pdf).
- *Criteria Air Pollutant Emissions of Biopower Generation from Forest Residues in California.* 2021. Fingerman, K. and Carman, J. EPC-16-047. Humboldt, CA: Schatz Energy Research Center. [schatzcenter.org/pubs/2021-biomass-R3.pdf](https://schatzcenter.org/pubs/2021-biomass-R3.pdf).
- *Total Cost of Ownership Comparison Between Fuel Cell and Battery Electric Fleets for Humboldt County Public Transit.* 2021. Carman, Jerome, Cassidy Barrientos, Alejandro Cervantes, Ian Guerrero, Charles Chamberlin. Humboldt Transit Authority.
- *Battery Electric Bus Optimization (BEBOP) Model.* Cervantes, Alejandro, Chih-Wei Hsu, Jerome Carman. California Department of Transportation. RGA-74A1076. (In Preparation)

- *Climate Resilient Battery Electric Fleet Feasibility Assessment for Humboldt County Public Transit*. 2020. Carman, Jerome, Alejandro Cervantes, Chih-Wei Hsu, Charles Chamberlin. California Department of Transportation, CAN 74A1076.
- *North Coast and Upstate Fuel Cell Vehicle Readiness Project - Task 2.4 Micrositing Summary Report*. 2018. Carman, Jerome and Aisha Cissna. California Energy Commission. CEC-ARV-14-055.
- *North Coast and Upstate Fuel Cell Vehicle Readiness Project - Task 2.4 Site Readiness Report*. 2018. Chapman, Greg and Jerome Carman. California Energy Commission. CEC-ARV-14-055.
- *Electric Vehicle Charger Selection Guide*. January, 2018. Interim deliverable on CEC-ARV-14-046 and CEC-ARV-14-058. (Technical consultant and core developer on authorless report)
- *Flexible Loads Supporting Clean Transportation and Decentralized Solar on the Electricity Distribution System*. Carman, Jerome, Andrew Harris, Kevin Fingerman, Peter Alstone. (In Preparation)
- *Humboldt County Greenhouse Gas Emissions Inventory Tool - Version 2*. November, 2017 (Technical consultant and core developer on authorless spreadsheet tool).
- *Humboldt County General Plan Update*. 2017. (Consulted with Redwood Coast Energy Authority and Humboldt County on projections of energy consumption through 2040).
- *Greenhouse Gas Emissions Assessment Roadmap for the North Coast Resource Partnership Region: Guidance and Recommendations in Support of Technical Area 3 of the Integrated Strategic Plan Effort*. Schatz Energy Research Center, 2017. West Coast Watershed. (Technical lead on authorless publication).
- *North Coast Plug-In Electric Vehicle Readiness Plan Implementation Project*. 2017 (Technical consultant and contributing author). California Energy Commission. CEC-ARV-14-046.
- *North Coast Plug-In Electric Vehicle Readiness Plan Implementation Project - Task 2.3 Micrositing Results Summary Report*. 2017. Carman, Jerome, Kristen Radecsky, Greg Chapman. California Energy Commission, grant CEC-ARV-14-046.
- *Northwest California Alternative Fuels Readiness Plan*. 2016 (Project manager and technical lead for planning effort and authorless publication). California Energy Commission. CEC-ARV-13-012.
- *Hoopa Valley Housing Authority Climate Action Plan*. 2015 (Project manager and technical lead on authorless publication).
- *City of Blue Lake Climate Action Plan*. 2014 (Technical lead on analysis and development of authorless publication).
- *Humboldt County Greenhouse Gas Emissions Inventory Tool - Version 1*. 2014 (Technical lead and core developer on authorless spreadsheet tool).
- *Humboldt Regional Transportation Plan 2013/14 Update Environmental Impact Report*. Humboldt County Association of Governments. 2014 (Technical consultant on transportation greenhouse gas and criteria pollutant impacts and authorless publication). SCH# 2013102063.
- *North Coast Plug-In Electric Vehicle Readiness Planning Project*. 2014. Zoellick, Jim, David Carter, Colin Sheppard and Jerome Carman. California Energy Commission. CEC-ARV-11-006.
- *imagine Humboldt! Final Report* Humboldt County Association of Governments. 2013 (Technical consultant on transportation greenhouse gas and criteria pollutant impacts and authorless publication).
- Redwood Coast Energy Authority. 2013 - 2015. Creation and/or update of municipal- and community-scale greenhouse gas emissions inventories for Humboldt County and all incorporated jurisdictions. (Project manager and technical lead for analyses and authorless publications).

#### TALKS GIVEN

- *Zero Emission Bus Conference (ZEB Con)*, Anaheim, CA. September 20, 2022. "Lessons Learned in Data Collection for Zero Emission Fleet Planning: OEM Specifications, Modeling, and Field Testing in a Rural Context"
- *Electric Policy Research Conference*, Park City, UT. September, 2017. "Flexible Loads Supporting Clean Transportation and Decentralized Solar on the Electricity Distribution System"
- *California Pollution Control Officers Association Annual Statewide Meeting*, Lake Tahoe, May 2017: "Regional Hydrogen Infrastructure Planning in California". Co-presented with the Redwood Coast Energy Authority and the Santa Barbara County Air Pollution Control District.

- *Sustainable Futures Speaker Series*, Arcata, CA. April, 2016. "Guiding Northwest California Towards Alternative Transportation Fuels: A Roadmap to 2020 and Beyond". Co-presented with Dr. Kevin Fingerman.
- *Mendocino FarmHack: Fuel Farming for the 21st Century*. Willits, CA. December, 2014. "Current Status of Alternative Fuels Legislation and Funding in California".
- *American Linear Collider Workshop Of The Americas*, Albuquerque, September 2009: "Longitudinal Position Measurement For Silicon Strip Sensors Via Charge Division"

### PROGRAMMING LANGUAGES

- R: proficient, particularly with data tables
- Python: novice
- Matlab: stale, proficient ten years ago
- C++: stale, intermediate ten years ago

### PROFESSIONAL MEMBERSHIPS

- California Energy Commission Clean Transportation Program Investment Plan Advisory Committee: 2020 - Present.
- Redwood Coast Energy Authority Community Advisory Committee: 2018 - Present.
- Active friend of the Transportation Research Board AP055 Standing Committee of Rural Transit, Intercity Bus and Specialized Transportation: 2022 - Present.
- Eureka Chamber of Commerce: 2017 - 2022
- Association of Environmental Professionals: 2019 - 2022.

### POSTER PRESENTATIONS

- American Meteorological Society's 13th Conference On Cloud Physics, Portland OR, June 2010: "Characterizing The Entrainment Interface Layer Of Marine Stratocumulus"
- Berkeley Atmospheric Science Symposium, Berkeley CA, February 2010: "Initial Results Of The Physics Of Stratocumulus Top Project"
- American Geophysical Union Fall Meeting, San Francisco CA, December 2009: "Initial Results Of The Physics Of Stratocumulus Top Project"

### AWARDS AND SCHOLARSHIPS

- *2022 North Coast Responsible Transportation Champion*  
Annual award given by the Coalition for Responsible Transportation Priorities to leaders who further the mission of promoting transportation solutions that protect and support a healthy environment, healthy people, healthy communities, and a healthy economy on the North Coast.
- *National Science Foundation Fellowship In Support Of Graduate Studies*  
A scholarship to fund a professional graduate degree in environmental resources engineering at Humboldt State University.
- *Chancellor's Award For Outstanding Undergraduate Thesis*  
One of three awards for outstanding undergraduate thesis within the physical sciences division.
- *Dean's Award For Outstanding Undergraduate Thesis*  
One of ten awards for outstanding undergraduate thesis within the physics department.
- *American Linear Collider Workshop Of The Americas Scholarship*  
A full scholarship and travel stipend to give a talk and attend the lectures at this workshop.
- *United States Particle Accelerator School Scholarship*  
A full scholarship and travel stipend to attend a two-week course on the fundamental physics of particle accelerators. Held in Houston, Texas, this course was hosted through Texas A&M University.
- *Ted Bowen Scholarship*  
Scholarship awarded by the chair of the Cabrillo College Engineering Department for my volunteer work and scholastic achievements.

- *Mathematics, Engineering, Science, Achievement Award*

A monetary award for outstanding academic skills and study habits, and for consistently attending their physics workshops.

### INTERNSHIPS

**Greenhouse Gas Inventory Intern**      **Redwood Coast Energy Authority**      Summer 2011  
Worked with a high energy particle detector design group to characterize the noise performance of a prototype data acquisition chip.

**Undergraduate Intern**      **Stanford Linear Accelerator Center**      Summer 2007  
Worked with a high energy particle detector design group to characterize the noise performance of a prototype data acquisition chip.

### EXTRACURRICULAR EDUCATION

**Association of Environmental Professionals CEQA Workshops**      2020 - 2021  
Attended three 4-hour workshops covering beginning, inter

**TransCAD Training with CalTrans**      Summer 2013  
Attended a three day overview course of TransCAD software and how to utilize the Humboldt County Transportation Model.

**United States Particle Accelerator School**      Winter 2006  
Attended a two week undergraduate course on the physics of particle accelerators. Involved hands-on laboratory experiments with accelerator components and electronics.

**SLAC Summer Institute**      Summer 2006 and Summer 2007  
Attended a two week series of lectures at the Stanford Linear Accelerator Center on the topics of LHC physics (2006) and dark matter (2007).