Charles Hammond, EIT

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Motivated engineering-in-training and environmental engineering graduate student with a keen interest in providing practical, scientific, solutions to real-world environmental problems. Interests include water and wastewater treatment, bioremediation, hydrology/ecohydrology, environmental health, and sustainable agriculture.

Education	B.S. Civil Engineering, University of California, Davis, June 2019, GPA: 3.88 M.S. Environmental Engineering, University of California, Davis, June 2021, GPA: 0.00
Software	LaTeX, OS X, Windows, Ubuntu, MATLAB, AutoCAD, SolidWorks, ArcGIS, VMware Fusion, Bootcamp, Visual MINTEQ, FlowMaster, Microsoft Office, Bluebeam Revu, ProjectWise.
Skills	Public speaking, skilled in writing for multiple/complex audiences, technical writing, extensive experience working in teams, conversational Japanese, basic Spanish, basic Mandarin.
Relevant Coursework	Wastewater Treatment, Hydraulic Design, Optimization, Aqueous Chemistry, Physical & Chemical Treatment Processes, Aqueous Analytical Methods.

Project/Work Experience

Water Resource Recovery Facility EIT Summer 2019

HDR, Folsom, California

International firm specializing in engineering, architecture, environmental, and construction services.

- ▷ Semiconductor wastewater biological ammonia removal treatability study in Austin, Texas
- ▷ Central San aeration basin oxygen transfer efficiency testing
- ▷ DCLTSA headworks upgrade technical memorandum
- ▷ King County compost market assessment

Environmental Engineering Intern Summer 2018

Sanitation Districts of Los Angeles County (LACSD), Whittier, California

A wastewater and solid waste management organization serving 5.6 million people and 78 cities in Los Angeles County.

- ▷ Focused on Tulare Lake Compost, a cutting-edge biosolids composting facility.
- ▷ Analysis of extensive datasets to investigate compliance with EPA Part 503 and various state permit requirements.
- ▷ Worked in team with four professional engineers to produce compliance reports and facility operating manuals.

Ultraviolet Disinfection System Design - 3.6 MGD Facility Spring 2019

University of California, Davis

Designed UV disinfection system for the UC Davis wastewater treatment plant.

- ▷ Low UV transmissivity was main challenge
- ▷ Line source integration model allowed for dead-zone analysis
- ▷ CFD analysis supported laminar flow assumptions
- ▷ Recommended design consisting of:
  - ◇ Trojan UV3000Plus lamps with 3-inch on-center spacing
  - ◇ Three channels with three banks per channel (two banks active, one bank standby)

Rapid Small Scale Column Test (RSSCT) Studies December 2017-Spring 2019

University of California, Davis

Performed RSSCTs for small-scale drinking water agencies; responsibilities included,

- ▷ Construction and operation of test equipment.
- ▷ ICP-MS analysis of samples.
- ▷ Data evaluation.
- ▷ Production of final reports.

Hobbies	Baseball, cello, backpacking, judo, hapkido, fermentation (especially kimchi), languages, farming, go.
References	Mike Falk, Ph.D, P.E., Senior Professional Associate, HDR Inc. Mike.Falk@hdrinc.com
	Jeannie Darby, Ph.D, P.E., UC Davis Professor. jdarby@ucdavis.edu
	Peter Green, Professional Research Engineer. pggreen@ucdavis.edu