

ERIK VERLAGE

California Institute of Technology

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EDUCATION

October 2011 - present	California Institute of Technology , Pasadena, CA Ph.D. Candidate — Department of Materials Science Atwater Research Group, Joint Center for Artificial Photosynthesis
Sept. 2007 - June 2011	Massachusetts Institute of Technology , Cambridge, MA Bachelor of Science in Physics

RESEARCH

October 2011 - present	Atwater Research Group, Joint Center for Artificial Photosynthesis, CalTech Graduate Student - <i>Harry Atwater</i> Currently developing methodology for the protection of high-quality III-V photoelectrodes for use in solar fuels generators. Examining methods for device integration in order to achieve high-efficiency photoelectrochemical water splitting.
Sept. 2010 - July 2011	Photovoltaic Research Laboratory, MIT Research Assistant - <i>Tonio Buonassisi</i> Designed and conducted experiments to accurately measure the diffusivity of nickel in silicon, with a goal of replacing expensive silver contacts in photovoltaic solar cells with nickel.
May 2010 - December 2010	Human Dynamics Group, MIT Media Lab Research Assistant - <i>Daniel Olquin</i> Assisted in the implementation of high-level speech processing functions used in the Media Lab's sociometric badges, important for analyzing the characteristics and evolution of conversations within an organization. Implemented voice feature recognition software in Matlab and C for a new generation of sociometric badges.
Summer 2008	Affective Computing Group, MIT Media Lab Research Assistant - <i>Rich Fletcher, Rosalind Picard</i> Integrated wireless biosensors into games made with Scratch, a visual programming language created in the Media Lab, to familiarize autistic children with social and emotional interactions.

SKILLS

Programming	Proficient: JavaScript, HTML5, MATLAB, Mathematica, LaTeX Familiar: Python, C++, Java, IGOR Pro
Software	Proficient: Photoshop, GitHub, Slack, Trello, Microsoft Office (PowerPoint, Excel, Word) Familiar: Unity, Screenflow, Adobe Illustrator, Avid Media Composer

OUTREACH AND EDUCATIONAL CLUBS

2016	Gamkedo Game Development Club (www.gamkedo.com/club)
2015	Caltech Summer Undergraduate Research Fellowship (SURF) - Mentor Caltech Science Saturdays Series - Matinee Host
2014 - 2015	Solar Energy Activity Lab (SEAL) High School Outreach - Mentor
Fall 2013	Caltech Course E110: Principles of University Teaching in STEM