

Mark Akio Ikaika Rau, E.I.T.

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EDUCATION

Carnegie Mellon University :: Pittsburgh, PA
Department of Civil & Environmental Engineering

Masters of Science in Civil Engineering :: May '06
Infrastructure Systems & Project Management Program

Bachelors of Science in Civil Engineering :: May '05
Minor in Engineering Design
Minor in Photography & Digital Imaging
Graduated w/ University Honors (GPA 3.6/4.0)

Punahou School :: Honolulu, HI :: Class of 2001

COURSEWORK

Advanced Project Management for Construction,
Civil Systems Investment Planning & Pricing,
Technical Communication for Engineers,
Environmental Engineering, Sustainable Engineering,
Design & Construction, Infrastructure Management,
Transportation Engineering, Hydraulic Structures,
Engineering Statistics, Engineering Economics,
Structural Analysis, Structural Design

ACTIVITIES AT CARNEGIE MELLON

Chi Epsilon Civil Engineering Honor Society :: President
American Society of Civil Engineers :: Social Chair
Concrete Canoe Competition Design Team :: Member
The Carnegie Pulse online newspaper :: Photo Manager
The Tartan student newspaper :: Production Manager

WORK EXPERIENCE

Communications Design Group :: Jan '05 - Present
Technical Support Assistant in main office at Carnegie Mellon,
supporting a 20+ member design and administrative staff.

Aquarium Systems & Ponds, Inc. :: May '05 - Aug '05
Construction Engineer for design and construction of large
aquariums and ponds, requiring life support systems for
various aquatic life, including reef fish, sharks, rays and koi.

R.M. Towill Corporation :: Jun '04 - Aug '04
Engineering Aide for general civil engineering, drainage, and
roadway design calculations, utilizing AutoCAD drafting and
HEC-RAS modeling. Extensive exposure to ADA Curb Ramp
design and renovation in various counties of Hawaii.

Hawaii Photo Refurbishing :: May '02 - Aug '02
Founder/Operator of independent contractor business capable
of refurbishing photographic darkrooms and enlargers.

EPA Supersite, Pittsburgh :: Jan '02 - May '02
Undergraduate Research Assistant for air quality research at
Carnegie Mellon, part of a Federally funded initiative.
Monitored multiple air filters and sterilized testing equipment.

PUBLISHED WORK

GreenBlue's eDesign Competition :: Spring '04
*Bridging the Information Gap: Material Tracking and
Consumer Labels to Encourage Sustainable Computing*
Honorable Mention :: <http://www.greenblue.org/edesign/>

ACADEMIC PROJECTS

Design and Construction Project :: Spring '05
Renovation of Concrete Lab used for classroom instruction
according to ABET and ASTM standards for mixing, curing
and testing concrete samples, responsibilities included CAD
drafting and project management of \$40,000 budget.

Engineering Design Project :: Spring '05
Redesigned instrument cart for National Environmental
Assessment Toolkit project in collaboration with the Center for
Building Performance and Diagnostics at Carnegie Mellon.

Senior Design Projects :: Fall '04
Designed footbridge with a 40' span to allow access to a
Harmony Trail Council rail-to-trail project in Wexford, PA.
Developed environmental remediation and redevelopment
plan for a manufactured gas plant facility along Lake Michigan.

PROFICIENCY

BuzzSaw, Primavera, Timberline, Microsoft Project & Access,
AutoCAD, HEC-RAS, StormCAD, Maple, Mathcad, MiniTAB,
Microsoft Office, Adobe Creative Suite 2, Macromedia Studio,
HTML, PHP, Unix, Linux, Mac OS X, Windows XP