Samuel Payne
Pacific Grove CA

ENGINEERING RESEARCH EXPERIENCE

SR Lab. Institute for Ultrafast Spectroscopy and Lasers. Physics Department, City College CUNY and NYU Langone.

Providing Research support on various projects including:

• Cholesterol Transport and Thermodynamics
• Quantification of Nanoparticle Delivery by Fourier Spatial Frequency Analysis (working with team developing methods of analyzing sub-diffraction level particles).
• Antenna design and wave attenuation in scattering media

Research Skills

• Matlab programming
• Solid Works
• Lab experience with centrifuge and spinning of HDL at NYU Langone Cancer Research Center
• Writing and editing
• Poster Presentation

Relevant Course Work

Engineering Mechanics (Statics and Particle Kinematics), Engineering Dynamics, Mechanical Drafting (Solid Works), Thermodynamics, Computer Methods for Engineers, Mechanics of Materials

Physics, Calculus 1 2 and 3, Differential Equations, Probability, Linear Algebra, Chemistry, Biology,

Publications "An interactive visual interface for the determination of similarity patterns in the Fourier spatial frequency spectrum of laser speckle." Samuel Payne, Lisa Chan, Wei Cheng Lin, Stewart Russell. Optical Biopsy XV: Toward Real-Time Spectroscopic Imaging and Diagnosis. SPIE Vol. 10060.

Presentations

Presented paper mentioned above in San Francisco, CA to SPIE Photonics Conference.

Awards
Top Scholar Award.
ORCA Fellowship.

Education
B. Eng, *Mechanical Engineering.* City College of New York. New York, NY (Incomplete)
MFA, University of Washington. Seattle, WA
BA, Hampshire College Amherst, MA