Patrick Macatangga

Aspiring Biomedical Engineer

Colmar Manor, MD - Email me on Indeed: indeed.com/r/Patrick-Macatangga/e8a5c9a0000ec2aa

Applied Biomedical Engineering Master's graduate. Seeking job opportunities in the public health field. Most interested in medical devices, healthcare, and research. Strong research and problem solving skills.
Willing to relocate: Anywhere
Authorized to work in the US for any employer

WORK EXPERIENCE

Software Developer

Information Management Services, Inc - Calverton, MD - December 2012 to June 2016

Provided requirements analysis, object-oriented software design, and programming support for three separate projects:
Biospecimen Inventory System (BSI), a Java client/server application designed as a virtual repository system; Cancer
Surveillance and Tracking (CaST), a C++/CLI application used for collecting information on screening and diagnostic
procedures performed for breast, cervical, and colorectal cancer; NCORP-SYS, a web-based private system that performs a variety of functions to support the NCI Community Oncology Research Program (NCORP).
• Assisted in reporting and documenting software bugs, errors, and other issues found within software applications.

Student Researcher

UMBC - Baltimore, MD - March 2011 to June 2012

• Developed prototype nanowire-based amperometric glucose biosensor to improve device sensitivity.
• Fabricated working electrodes using cleanroom technology, such as photolithography and chemical wet etching.
• Investigated the growth and differentiation of neural cells for detection of symptoms relevant in Parkinson's disease.

Student Summer Intern

UMBC - Los Angeles, CA - June 2011 to August 2011

• Synthesized ZnO nanowires on approximately 2cm by 6cm Si nanowire array substrates using chemical vapor deposition.
• Examined characteristics of ZnO/Si heterostructures by scanning electron microscopy.
• Presented findings in end-of-summer symposium and discussed importance or research pertaining to photovoltaic
applications.

Student Summer Intern

Johns Hopkins University Applied Physics - Laurel, MD - June 2010 to August 2010

• Assisted in the development of a Java application utilizing the concept of social query.
• Annotated over 20 blogs to create a folksonomy for tagging.
• Observed behavioral trends and patterns between bloggers via human annotation.

Student Summer Intern

National Institute of Standards and Technology - Gaithersburg, MD - June 2009 to August 2009

• Acquired knowledge about fire growth and its behavior on polyurethane flexible foam.
• Compiled useful data by observing video recordings of fire growth tests to develop and validate a model for the NIST Fire
Dynamics Simulator.
• Co-authored a research publication and presented findings at internship symposium.

EDUCATION

Master of Science in Applied Biomedical Engineering

Johns Hopkins University - Baltimore, MD
May 2016

Bachelor of Science in Computer Engineering

University of Maryland Baltimore County - Baltimore, MD
May 2012

SKILLS

C++/CLI (2 years), Java (2 years), MATLAB (6 years), PHP (Less than 1 year), HTML (Less than 1 year), C (2 years), Verilog (1 year), Microsoft Office (10+ years), Salesman experience (2 years), Research (2 years), Presentation Skills, SQL (Less than 1 year)

AWARDS

Tau Beta Pi Engineering Honor Society inductee

2010

Meyerhoff National Security Agency Affiliate Scholar

2009

PUBLICATIONS

Fire Spread and Growth on Flexible Polyurethane Foam

https://www.nist.gov/node/619721?pub_id=903983
October 2009

ADDITIONAL INFORMATION

I am looking to start my career within the biomedical engineering/medical device industry. I would like to work for a company in which I can grow with professionally. As a student, I have worked on several research projects and I work well in a research-oriented environment. I am a quick learner, organized, and can work well within teams and independently. I have experience in giving oral presentations, analyzing and interpreting technical materials and reports, and writing technical material.

Other interests: research and development, policy, laboratory/cleanroom, technical support, customer service.

Programming Languages: Proficient in Java, C++/CLI, MATLAB. Familiarity in PHP, C, Verilog, VHDL, SQL.

Computer Applications: Proficient in Eclipse and Visual Studio. Exposure to NetBeans, Eagle CAD, LTSpice/ PSPICE, Xilinx,
Cadence, Microsoft Access, pgAdmin, SVN, Git.
Laboratory Skills: Previous exposure to using oscilloscope, function generator, spectrum analyzer, electron microscopy. Exposure
to microfabrication techniques, such as wet etching, liftoff, evaporation, and photolithography. Familiar with pipetting, solution
preparation, cell culturing.