

Bob DiMaiolo

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EDUCATION

University of Pennsylvania (Philadelphia, PA) May 2017

M.S. in Embedded Systems, Computer & Information Science Dept. | GPA: 4.00 (out of 4)

- Coursework: Computer & Network Security, Software Systems, Database and Info Systems, Computer Architecture, Software Engineering

Duke University (Durham, NC) May 2012

B.S. in (dual major) Electrical & Computer, Biomedical Engineering | GPA: 3.674 (out of 4)

ACADEMIC PROJECTS

- 1) Fully distributed chat program in C/C++; implemented reliable group management and messaging on top of UDP for Linux systems with leader election, encryption, GUI, network traffic control, and distributed checkpointing for system recovery
- 2) Datalake management system using Java and AWS; maintained a schema-less collection of heterogeneous data with a web interface deployed on Amazon Web Services.
- 3) Fault localization using Java and Python; integrated unit test statement coverage and results with a control flow graph visualization to identify areas of source code likely to contain a fault.
- 4) Interfacing with Electronic Health Records; developed a JavaScript client incorporating MV* frameworks to improve the clinical workflow for care providers

WORK EXPERIENCE

MediaMath (New York, NY) Jun 2016 – Aug 2016
Software Engineer Intern

- Developed applications and infrastructure-as-code for reliable, scalable fee tracking using Spark and AWS
- Setup automated provisioning of resources and unit testing for continuous integration
- Designed a regression testing framework using Python to verify business logic implementations in Spark

Medtronic (Santa Rosa, CA) Jun 2013 – Jun 2015
Design Assurance Engineer

- Led a team to execute hardware verification of Renal Denervation (RDN) capital equipment, drastically improved test coverage and reduced overall testing time by 30%
- Designed and validated automated data analysis tools using Python for software/system integration testing
- Provided technical and regulatory support for the *Symplcity G3™ Generator* from premarket phases through commercial launch

Lutron (Coopersburg, PA) Jun 2012 – May 2013
Project Electrical Engineer

- Completed rotations in Engineering, Project Management, Manufacturing, and Sales as part of the Field Engineer Leadership Development Program
- Designed software applications and an embedded sensor system to catch manufacturing defects and alert operators in real-time
- Analyzed user needs in deploying customized networked lighting control using the *Quantum® System* for large building automation

TECHNICAL SKILLS

Programming Languages: Java, Python, C/C++, JavaScript, HTML/CSS, SQL, bash, MATLAB, R
Software Tools: Apache Spark, Amazon Web Services (EC2, S3, Lambda, DynamoDB, EMR, CloudFormation), Ansible, Travis CI, JIRA, Git