

NICK DIPRIMO

DESIGN ENGINEER

CONTACTS

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Password: application
📍 Hoboken, NJ

TRADES

CAD Solid Modeling
CAD Surface Modeling
Drafting
Rendering
Graphic Design
Programing
Rapid Prototyping (FDM, SLA, SLS, Laser)
Mechanical Fabrication
Electronic Prototyping

SOFTWARE

CATIA V5/V6, Solidworks, 3DS Max,
Inventor, Fusion 360, ProE/Creo,
HyperMesh, Photoshop, Inkscape,
Arduino, MATLAB, MS Office

LANGUAGES

English (Native)
Spanish (Fluent)
Italian (Working)

EXPERIENCE

Acatsys Inc: Lead Integration (Mechanical) Engineer

July 2020 - Present

Startup which develops synthetic jet actuators to clean autonomous imaging sensors and cool electronics

- Lead mechanical design with a focus on engineering principals such as statics/dynamics, fluid mechanics, environmental robustness, thermal management, NVH, assembly, manufacturing, and more
- Research advanced topics in the field of unsteady synthetic jets and vibroacoustics
- Design, prototype, and test mechanical, mechatronic, and smart material components and assemblies
- Create renderings and functional sculptures for marketing, showcases, and global trade shows
- Presentations detailing new technology and concepts for customers, investors, and board members
- Manage, execute, and deliver multi-discipline projects for global customers
- Develop, mentor, and coach coworkers, young engineers, and interns

Honda R&D Americas: Brake Design Engineer

Nov 2016 - Jan 2021

- CAD design various brake components and test fixtures in both solid and surface modeling
- Analyze and optimize designs based off of stress, deformation, weight, and kinematic simulations
- Draft 2D representations with a focus on notation, tolerances, GD&T, and Honda standards
- Estimate, review, and correlate cost and investment to meet team set project targets
- Manage global suppliers for part maturation, quality specifications, and lead time planning
- Collaborate with other function groups and factory to address concerns with total vehicle performance
- Review prototype vehicles, identify concerns, and root cause analyze to further enhance designs
- Executive presentations of project maturity, designs, calculations and test results at given milestones
- Develop schedules and recovery options with impacts when concerns were found or targets changed

F&G Mechanical: Graphic Design Intern

May 2015 - Aug 2015

NAPD Chassis: Engineering Design Intern

Jan 2014 - May 2014

BMW of North America: Head Unit Engineering Intern

May 2013 - Aug 2013

Mercedes-Benz USA: Product Support Engineering Intern

June 2012 - Dec 2012

EDUCATION

Stevens Institute of Technology: Hoboken, NJ

Aug 2011 - May 2016

B.E. Mechanical Engineering

3.865 GPA

- Concentrations: Automotive Engineering and Power Generation

M.E. Mechanical Engineering

3.934 GPA

- Concentration: Product Design

Awards: High Honors, Col. John Stevens Award, Dean's List, President's List, Edwin A. Stevens Scholar, and Presidential Scholar

Activities: Track and Field, Chi Psi Fraternity (President and Treasurer), Formula SAE (Team Leader)

Formula SAE Team

- Participated on three complete FSAE vehicles culminating with being team leader for my senior project
- Designed, analyzed, and fabricated many components including the frame, drivetrain, and intake
- In comparison to 2015, the optimized 2016 vehicle weighed 60lbs less at 547lbs with an almost perfect 50/50 weight distribution, while the intake and tune produced double the horsepower at 101HP