

1046-65-2117      **Max Gunzburger\*** ([gunzburg@fsu.edu](mailto:gunzburg@fsu.edu)), Department of Scientific Computing, DSL400, Florida State University, Tallahassee, FL 32306-4120. *Experiences in computational science and the Department of Scientific Computing at FSU*

We review our own experiences as a computational scientists,

highlighting how basic research in algorithms allow one to work in and impact diverse applications areas. The particular algorithmic classes

we touch on are finite element methods, centroidal Voronoi tessellations, and PDE constrained optimization. The application areas

include aerodynamics, superconductivity, climate modeling, and groundwater flows. We then turn our attention to how to best train computational scientists, leading us to describe the missions and degree programs of the new Department of Scientific Computing at Florida State University. (Received September 19, 2008)