NSF Proposal Template
(LaTeX format)

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This latex template includes all major pieces (in bold below) typically required for an NSF proposal. The idea is that the PIs create one PDF document, from which each piece can be extracted and uploaded to FastLane. I have structured it as a two-PI proposal, to make things easy in case (for example) each PI wishes to write a separate technical section or bring a separate `.bib` file to the bibliography.

You can retrieve this template from any CSAIL machine with the following command (all on one line):

```
svn checkout
svn+ssh://svn.csail.mit.edu/afs/csail.mit.edu/group/rvsn/funding/NSF/template
```

Using this template might save both you and CSAIL HQ staff some work next time you put in an NSF proposal.

– Seth Teller (`teller@csail.mit.edu`), Nov. 2006

- **PI/Co-PI Information, Proposal Title, etc.** must be keyed in directly to FastLane.
- `proposal.tex` – this document.
- `author.tex, title.tex` – **Proposal Cover Page**
  (not uploaded, but admin/HQ folks can refer to this when keying in FastLane fields for proposal creation).
- `summary.tex` – **Proposal Summary** (1 page).
- `objectives.tex, technical.tex, sow.tex, related.tex` –
  Research Objectives, Statement of Work, Related Work (15 pages).
- `refsA.bib, refsB.bib` – **References Cited** (no page limit).
- `budget.tex` – **Budget Justification**, written by PIs, massaged by HQ staff and uploaded to Fastlane.
- `facilities.tex` – **Facilities Description**, written by PIs, massaged by HQ staff, uploaded to Fastlane.
- `biosketches.tex` – **Biographical sketches** (2 pages per PI; no bios needed for co-I's).
- **Budget spreadsheet** – prepared by CSAIL HQ staff.
- **Current and Pending Support page** – prepared by CSAIL HQ staff.
- **Supplementary documents** – things such as quotes for large equipment items.
  PIs/Admins or CSAIL HQ staff should upload these separately to FastLane as needed.
- **Suggested Reviewers / Non-Reviewers** – optional; key in directly to FastLane.
- **Deviation authorizations** and **Additional single-copy documents** – usually N/A so are omitted here.

Project Summary **(1 page)**

This is a summary of the project, with a strict 1-page limit.

After generating PDF, strip out this page and upload it separately to FastLane.

Intellectual Merits of the Proposal Activity

Address these here.

Broader Impacts of the Proposal Activity

Address these here.

Project Description

1 Research Objectives

This is the first section of the 15-page technical portion of the proposal. Use citations liberally; the bibliography doesn't count towards the page limit.

State research objectives here.

1.1 Intellectual Merit of the Proposed Work

Describe the intellectual merit of the proposed work here.

Figure 1: Our proposed research plan involves an iterated cycle of design, implementation and user testing.

Describe the intellectual merit of the proposed work here.

1.2 Broader Impact of Proposed Work

Describe the broader impact of the proposed work here.

Describe the broader impact of the proposed work here.

2 Another Technical Section

This is another technical section.

2.1 Technical Subsection

This is a technical subsection.

2.2 Technical Subsection

This is a technical subsection.

3 Statement of Work

Give the statement of work here. Give the statement of work here. Give the statement of work here. Give the statement of work here. Give the statement of work here. Give the statement of work here. Give the statement of work here. Give the statement of work here. Give the statement of work here.

3.1 Schedule

Year 1	Some pieces Some other pieces By the end of year 1, we expect to ...
Year 2	Some pieces Some other pieces By the end of year 2, we expect to ...
Year 3	Some pieces Some other pieces By the end of year 3, we expect to ...

3.2 Team Composition and Expertise

Our team comprises four investigators, A, B, C, and D, whose areas of expertise span the critical areas of ...

A's areas of expertise include ...

B's areas of expertise include ...

3.3 Connections to Education and Outreach

Describe any connections to educational and outreach activities here. Describe any connections to educational and outreach activities here. Describe any connections to educational and outreach activities here. Describe any connections to educational and outreach activities here. Describe any connections to educational and outreach activities here. Describe any connections to educational and outreach activities here. Describe any connections to educational and outreach activities here. Describe any connections to educational and outreach activities here.

4 Related Work

Describe related work [1, 2] here.

5 Results from Prior NSF Support

Describes any prior NSF-funded work by the PI(s) here.

Person A has served as a PI on the following NSF awards:

NSF XXX-YYYYYYY, TITLE
(1995–1998); PI: A

This project involved ...

NSF XXX-YYYYYYY, TITLE
(1996-2001); PI's: A, B, C

This project involved ...

Person B has served as a PI or Co-I on the following NSF awards:
etc.

References Cited

[1] bar. *bar*. MIT Press, 1985.

[2] foo. *foo*. MIT Press, 1985.

6 Facilities

All work will be performed within the MIT Computer Science and Artificial Intelligence Laboratory (CSAIL). CSAIL is equipped with a large number of individual workstations, running a variety of operating systems, all interconnected on wireless and wired networks. Most machines use AFS for file storage; the CSAIL administrators provide an SVN server for source control of multiple source trees.

This project will have access to specific MIT CSAIL facilities, including:

- Robotics laboratory
- Hardware lab
- System administrators
- Machine shop
- Gigabit Ethernet
- Several Tb of AFS storage with daily backup

CSAIL also maintains extensive mechanical and electrical prototyping facilities, allowing rapid system construction. A complete machine shop and sheet metal prototype fabrication facility is available, along with stocks of small electrical components, connectors, wire, etc. All of this enables us to make quick mock-ups of proposed designs. The Laboratory provides an environment of excellent students interested in advanced systems, networking HCI and software technologies, knowledge-representation, reasoning, planning, decision-theoretic techniques, and inference.

MIT / Computer Science and Artificial Intelligence Laboratory
PIs: Person A and Person B
Proposed Budget Period: 06/01/2007 – 05/31/2010
Budget Justification for Cost Proposal

A. Key Personnel:

Last Name	Review/Raise
Person A	June
Person B	June

MIT fully supports the academic year salaries of professors, associate professors, and assistant professors, but makes no specific commitment of time or salary to any individual research project.

B. Other Personnel:

(1) Research Assistants:

100% of the stipend is charged to the research project. The RA stipend is not subject to employee benefits. Stipend for the year beginning on 06/01/2007 is $2,125/mo for a PhD student and $1,940/mo for a Masters student. A 4% raise is applied each year (in June).

(2) Other (Technical & Administrative Support):

The Computer Science Artificial Intelligence Laboratory (CSAIL) provides administrative services for all principal investigators who submit proposals through CSAIL. These administrative services are run by the Headquarters Staff and include Fiscal, Personnel, Facilities and other CSAIL operations.

These services are supported by an Allocated Project Level Cost, which is assessed against all contracts and grants. The current rate for the Salary Allocation is 8.34%. The Allocation Base is shown below:

Allocation	Year 1	Year 2	Year 3
Base	$XXX,YYY	$XXX,YYY	$XXX,YYY

C. Fringe Benefits

(1) Employee benefits are calculated at the rate of 27.0% and are applied to total salary expenses, less Research Assistants.

(2) Vacation accruals are calculated at the rate of 9.5% and are applied to total salary expenses, less Faculty and Research Assistants.

D. Travel:

(1) Domestic Travel:

(2) Foreign Travel:

E. Other Direct Costs:

(1) Material & Supplies:

Estimated costs for software and supplies needed for the project.

(2) Computer Services:

MIT/CSAIL has a centralized network services function. The costs consist of Network Services at $100/person/month and Network Facility Charges at $150/person/month. The base number of people used for this calculation was 2 (the two full time RAs).

(3) Other:

(a) RA tuition: For the academic year starting 2006, MIT 9-month tuition is $33,400. A 4% annual inflator is applied each year. MIT will subsidize 45% of tuition, leaving 55% to be charged to the project. During the summer, MIT has waived tuition.

(b) Allocated expenses are assessed against all contracts and grants. The current rate for the Materials and Services Allocation is 1.24%. These funds help support the Headquarters staff mentioned above in the section entitled "Other (Technical & Administrative Support)". Please see the table in that section for the allocation base.

(4) Equipment:

The equipment line items will support purchases as follows:

- Year One ($X,XXX): enter purpose, items and costs here
- Year Two ($X,XXX): enter purpose, items and costs here
- Year Three ($X,XXX): enter purpose, items and costs here

(5) [Describe any other direct cost items here]:

F. Indirect Costs (Facilities & Administrative Costs):

Effective 07/01/2006, F&A Costs are calculated by applying the negotiated rate of 65% to the Modified Total Direct Cost (MTDC) base. The MTDC base includes all direct costs, except Graduate Student Tuition, Network Facilities Charges, the Salary Allocation (and associated benefits), and the Materials and Services Allocation.

PI Biography: Person A

Professional Preparation:

School	Degree	Date

Appointments

Organization	Position	Date

Five Publications Relevant to Proposal

1. Authors,
   Title,
   Booktitle,
   Location, Month, Year, Pages.
2. Authors,
   Title,
   Venue,
   Location, Month, Year, Pages.

Five Other Selected Publications

1. Authors,
   Title,
   Booktitle,
   Location, Month, Year, Pages.
2. Authors,
   Title,
   Booktitle,
   Location, Month, Year, Pages.

Synergistic Activities

1. Activity 1.
2. Activity 2.

Awards and Honors

Award	Date

Recent Collaborators

Foo (MIT), Bar (Harvard)

Graduate Advisor

Person C (School)

Graduate Students (Completed)

Person E (Now at Nokia)
Person F (Now at CalTech)

PI Biography: Person B

etc.